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ABSTRACT

Containing data gathered in the 1979-80 assessment of reading and literature conducted by the National Assessment of Educational Progress (NAEP), this report is devoted to the results of the reading comprehension and study skills portions of the assessment. A brief introduction provides information about the students surveyed and the measures used in the assessment. The six main chapters of the report provide data concerning the following areas of the assessment: (1) students' perceptions about reading, their reading habits, and their experiences related to reading performance; (2) national and reporting group results on all comprehension exercises; (3) the comprehension tasks and the results of national and reporting group results on these tasks; (4) student performance on different reading passage types; (5) national results on skim and scan exercises, and national and reporting group results on study skills exercises; and (6) a synthesis of a dialogue among the educators participating in a review of the assessment's findings. Appendixes contain summaries of results for national and reporting groups on reading comprehension and study skills exercises, and examples of exercises used in the assessment. (FL) Results (Selective) (Secondary Analysis)

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Reading Comprehension of American Youth: Do They Understand What They Read?

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Reading Comprehension of American Youth:

Do They Understand What They Read?

Results From the 1979-80 National Assessment of Reading and Literature

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by the
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Foreword

When the U.S. Office of Education was chartered in 1867, one charge to its commissioners was to determine the nation's progress in education. The National Assessment of Educational Progress (NAEP) was initiated a century later to address, in a systematic way, that charge.

Since 1969, the National Assessment has gathered information about levels of educational achievement across the country and reported its findings to the nation. It has surveyed the attainments of 9-year-olds, 13-year-olds, 17-year-olds and adults in art, career and occupational development, citizenship, literature, mathematics, music, reading, science, social studies and writing. All areas have been periodically reassessed in order to detect any important changes. To date, National Assessment has interviewed and tested more than 1,000,000 young Americans.

Learning-area assessments evolve from a consensus process. Each assessment is the product of several years of work by a great many educators, scholars and lay persons from all over the nation. Initially, these people design objectives for each subject area, proposing general goals they feel Americans should be achieving in the course of their education. After careful review, these objectives are given to writers, whose task it is to create exercises (items) appropriate to the objectives.

When the exercises have passed extensive reviews by subject-area specialists, measurement experts and lay persons, they are administered to probability samples. The people in these samples are selected in such a way that the results of their assessment can be generalized to an entire national population. That is, on the basis of the performance of about 2,500 9-year-olds on a given exercise, we can make generalizations about the probable performance of all 9-year-olds in the nation.

After assessment data have been collected, scored and analyzed, the National Assessment publishes reports and disseminates the results as widely as possible. Not all exercises are released for publication. Because NAEP will administer some of the same exercises in the future to determine whether the performance levels of Americans have increased, remained stable or decreased, it is essential that they not be released in order to preserve the integrity of the study.

Acknowledgments

Assessing the educational performance of young Americans throughout the nation is an undertaking of major proportions. Certainly the reading and literature assessment could not have become a reality without substantial contributions by many people, not the least of whom are the students, teachers and administrators who cooperated so generously.

Special thanks are due to the dozens of consultants — both subject-area specialists and lay persons — who reviewed the materials used in the reading and literature assessments under the general guidance of the National Assessment of Educational Progress (NAEP) staff. Particular acknowledgment is given to Anthony Petrosky, University of Pittsburgh, and Robert Schreiner, University of Minnesota, for special assistance in item development.

The NAEP staff was joined by four distinguished educators in an intensive review of the results. They are: Edmund Farrell, University of Texas at Austin; P. David Pearson, Center for the Study of Reading, University of Illinois; Dorothy Strickland, Teachers College, Columbia University; and Jaap Tuinman, Simon Fraser University. Some of their interpretive remarks appear throughout this report. Their comments represent their best judgments. They do not necessarily reflect the views of their institutions, the National Assessment of Educational Progress, the Education Commission of the States or the National Institute of Education.

Our gratitude is also extended to the Reading/Literature Advisory Committee and other subject-area experts who participated in advisory and interpretive conferences for the several reading and literature assessments. The staff at NAEP appreciates the insights provided by these distinguished education and subject-area specialists.

Administration of exercises was handled by the Research Triangle Institute. Scoring and processing were performed by the Westinghouse Information Services and by the National Assessment staffs.

Every assessment report is the result of a collaborative effort by the National Assessment staff. Special thanks are extended to Nancy Mead, Michael Noe and Kay Barrow for technical planning development, analysis and scoring; Rexford Brown for development and editorial supervision; John Kalk and Suzie Sullivan for data processing support; Ava Powell for technical support; and Marci Reser for report production. The report was written by Barbara Holmes.

Roy H. Forbes
Director

Beverly L. Anderson
Deputy Director

Introduction

Each of the reading and literature assessments,[1] like other national assessments, has been undergirded by learning objectives thought important by a cross-section of American academicians, curriculum developers and specialists, classroom teachers, students and parents. The objectives (*Reading Objectives,* 1970; *Literature Objectives,* 1970; *Reading Objectives, Second Assessment,* 1974; *Literature Objectives, Second Assessment,* 1975; *Reading and Literature Objectives, 1979-80 Assessment,* 1980) have remained conceptually similar over the decade spanned by the reading and literature assessments. In response to a changing society, new research trends, shifts in teaching approaches and the availability and use of new technology and materials, the current objectives encompass a broad spectrum of the skills employed by readers and tap a broad range of their experiences with reading and their feelings about reading.

The objectives for the most recent reading and literature assessment expanded the conceptual base of the previous assessments by including the dimension "responding," that is, the reader's ability to respond to written works in interpretive and evaluative ways. Results for this objective, along with those for the "valuing" objective, are the subject of an earlier report, *Reading, Thinking and Writing* (1981).

The present report concerns readers' ability to comprehend what they read and to use study skills in reading.

The Data Base

The National Assessment of Educational Progress first assessed reading and literature achievement in separate assessments during the 1970-71 school year. Since that time, reading has been assessed twice as a discrete learning area (1974-75 and 1979-80) and reading and literature have been combined for a joint assessment in 1979-80. Each assessment surveyed the achievement and attitudes of American 9-, 13- and 17-year-olds, using a deeply stratified, multistage probability sample design.

Approximately 29,000 9-year-olds, 41,000 13-year-olds and 36,000 17-year-olds in school participated in the 1979-80 reading and literature as-

sessment. Because National Assessment reports results for groups of students, not individuals, it is not necessary for each student to respond to every item (exercise).[2] Many of the exercises used in the assessment were designed to be used with two age groups (9- and 13-year-olds, or 13- and 17-year-olds). A few exercises were designed to be used with all three age groups.

Students' reading comprehension performance was assessed by asking them to read passages and then answer one or more multiple-choice questions about what they read. In some cases, multiple-choice and open-ended questions were used to measure students' interest in the passage and students' feelings about and evaluations of the passage. All of the passages were drawn from existing textual material; they were not written specifically for the assessment. The passages represent a variety of reading and literary material that students are exposed to both in and out of school.

The exercises were administered by a professional data collection staff from the Research Triangle Institute to minimize the burden on participating schools and to maximize uniformity of assessment conditions. Instructions were recorded on a paced audio tape and played back to students to ensure that all students moved through the booklets at the same speed.

Scoring and computer recording of data for the reading and literature assessments were contracted to the Westinghouse Information Services. Responses to multiple-choice exercises were read directly by an optical scanning machine.

Measures of Achievement

The basic measure of achievement reported by National Assessment is the percentage of respondents answering a given item acceptably. This percentage is an estimate of the percentage of 9-, 13- or 17-year-olds who would respond acceptably to a given item if every 9-, 13- or 17-year-old in the country were assessed.

National Assessment reports estimated percentages of correct responses for single items. When a report indicates that "85% of the 17-year-olds gave a correct response," it means that an estimated 85% of the 17-year-olds would have given the correct response if all the 17-year-olds in schools across the country had been assessed.

In addition to providing results on individual items, National Assessment reports the average performance across groups of similar items — for the learning area as a whole, for a particular theme, objective or subobjective and so on. These results constitute the mean, or arithmetic average, of the estimates of performance on the group of items and are called the mean percentage correct.

The differences between percentages or averages for a reporting group and that of the entire age group (nation) on an exercise or set of exercises are used to describe the performance of any reporting group relative to the entire age group. This difference is a positive number if the group achieved a higher percentage or average than the entire age group and is a negative number if the group achieved a lower percentage or average. For example, a group performance of +1.8% indicates that the percentage of correct responses for the group is 1.8 percentage points higher than the national percentage of correct responses for that age level.

Different sets of items are given to each age group, reflecting the interests and skill levels of the population. However, some items are given to more than one age. Unless the items summarized in the mean percentages of acceptable responses are identical, the means of one age group should not be compared with the means of another. Also, when only a few exercises are summarized by a mean, one should be especially cautious in interpreting results, since a small set of exercises might not adequately cover the wide range of potential behaviors included under a given objective or subobjective. The mean should be interpreted literally as the arithmetic average of the percentage of acceptable responses obtained from National Assessment samples on a specific set of exercises.

Estimating Variability in Achievement Measures

National Assessment uses a national probability sample at each age level to estimate the proportion of people who would complete an exercise in a particular way. The sample selected was one of a large number of all possible samples of the same size that could have been selected using the same sample design. Since an achievement measure computed from each of the possible samples would differ from one sample to another, the standard error of this statistic was used as a measure of the sampling variability among achievement measures from all possible samples. A standard error, based on one particular sample, serves to estimate that sampling variability.

National Assessment has adhered to a convention whereby differences between statistics are designated as statistically significant if the level of significance is .05. That is, differences in performance between a reporting group and the nation are highlighted with asterisks *only* if they are at least twice as large as their standard error. Differences this large would occur by chance in 5% or fewer of all possible replications of our sampling and data collection procedures.

Reporting Groups

In addition to reporting national results, National Assessment provides data on the performance of various population subgroups within the national population, defined by sex, race/ethnicity, region of the country, size and type of community of school, level of parental education and grade in school.

Definitions of the reporting groups follow:

Age

National results are presented for 9-, 13- and 17-year-olds enrolled in school[3] at the time of the assessment. Nine-year-olds were assessed in January-February 1980; 13-year-olds in October-December 1979; and 17-year-olds were assessed in March-May 1980.

Region

The country has been divided into four regions: Northeast, Southeast, Central and West. States included in each region are shown on the following map.

Sex

Results are reported for males and females.

Race/Ethnicity

National results are presented for blacks, whites and Hispanos. Hispanic data are not available for the special analyses results presented in Tables 1-5 because the number of Hispanos is too small to assure reliability when performing two-way analyses of variables.

Level of Parental Education

National Assessment defines four categories of parental-education levels, based on students' reports. These responses represent students' perceptions of their parents' level of education. The high nonresponse at age 9 suggests that these students are less knowledgeable of their parents' level of education. These categories are: (1) those who have both parents who did not graduate from high school, (2) those who have at least one parent who has graduated from high school, (3) those who have at least one parent who has had some post-high-school education and (4) those who have at least one parent who is a college graduate.

Type of Community

Three extreme community types of special interest are defined by an occupational profile of the area served by a school as well as by the size of the community in which the school is located. This is the only reporting category that excludes a large number of respondents. About two-thirds do not fall into the classifications listed below. Results for these groups are not reported since their performance was similar to that of the nation.

Advantaged-urban communities. Students in this group attend schools in or around cities having a population greater than 200,000 where a high proportion of the residents are in professional or managerial positions.

Disadvantaged-urban communities. Students in this group attend schools in or around cities having a population greater than 200,000 where a high proportion of the residents are on welfare or are not regularly employed.

Rural communities. Students in this group attend schools in areas with a population under 10,000 where many of the residents are farmers or farm workers.

Size of Community

Results for these groups are presented in Appendixes A and B.

Big cities. Students in this group attend schools within the city limits of cities having a 1970 census population over 200,000.

Fringes around big cities. Students in this group attend schools within metropolitan areas (1970 U.S. Bureau of the Census urbanized areas) served by cities having a population greater than 200,000 but outside the city limits.

Medium cities. Students in this group attend schools in cities having a population between 25,000 and 200,000 not classified in the fringes-around-big-cities category.

Small places. Students in this group attend schools in communities having a population less than 25,000, not classified in the fringes-around-big-cities category.

Grade in School

Results are categorized for 9-year-olds in the 3rd and 4th grades; for 13-year-olds in the 7th and 8th grades; and for 17-year-olds in the 10th, 11th and 12th grades.

Achievement Class

Achievement class is a recently implemented background variable used by National Assessment to partition tne national sample into four ranges based on their performance in the assessment.

Achievement class 1. The lowest one-fourth of the national sample.

Achievement class 2. The middle lowest one-fourth of the national sample.

Achievement class 3. The middle highest one-fourth of the national sample.

Achievement class 4. The highest one-fourth of the national sample.

The differences between levels of performance for the nation and for each of the four achievement classes can easily be calculated. Also, the achievement class data make it possible to identify the range of performance — lowest to highest — on a given set of exercises. Results for the achievement classes are in Appendixes A and B.

In reporting group data, the following abbreviations have been used on graphs:

M = Males
F = Females
B = Blacks
W = Whites
H = Hispanos
SE = Southeast
NE = Northeast
C = Central
WE = West
NG = Neither parent has graduated from high school
GH = At least one parent has graduated from high school
PH = At least one parent has had some post-high-school education
CG = At least one parent has graduated from college
AU = Advantaged urban
DU = Disadvantaged urban
R = Rural

While the performance differences reported here may point to areas of concern, readers are cautioned not to ascribe these differences in performance levels to membership in the particular group described by the label. Any number of socioeconomic, school-related and environmental factors

contribute to performance on tests, and since no single factor adequately describes an entire group, care must be taken not to misinterpret these results.

Organization of This Report

Chapter 1, Perceptions, Habits and Experiences, presents results of the background questions administered in the assessment to probe students' feelings about and experiences with reading.

Chapter 2, Comprehending Written Works, presents a description of the comprehension objective and subobjectives and the results for 9-, 13- and 17-year-olds on their respective sets of exercises.

Chapter 3, Comprehension Tasks, describes results on the comprehension exercises classified by type of tasks as conceptualized by the developers of the reading and literature assessment. National and group results on these tasks are presented for each age populaton.

Chapter 4, Comprehending Different Types of Passages, discusses national and group results on the comprehension exercises given with passages classified as expository or literary.

Chapter 5, Applying Study Skills in Reading, describes the study skills results for students nationally and in groups, and presents a brief overview of results on the skim/scan exercises.

Chapter 6, Conclusion, summarizes the reflections of four distinguished educators and National Assessment staff about the findings and results from the 1979-80 reading and literature assessment.

Appendix A contains tables of summary results for the nation and reporting groups on the total pools of comprehension exercises for each age by types of tasks and passages. Appendix B contains the same kind of tables for the study skills exercises for each age. Appendix C displays examples of exercises used in the 1979-80 reading and literature assessment.

This report has been written for a broad reading audience with differing levels of technical expertise. Readers interested in additional technical information about methodology and data analyses may contact the National Assessment of Educational Progress office in Denver.

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[1]The three reading assessments were conducted in 1970-71, 1974-75 and 1979-80. The two literature assessments were conducted in 1970-71 and 1979-80, and reading and literature were combined in 1979-80.

[2]National Assessment uses the term "exercise" to mean an assessment item. The terms "exercise" and "item" are used interchangeably in this report.

[3]The reading assessments gathered data on both in- and out-of-school 17-year-olds, but, for the sake of comparability with data for other age levels, only in-school data are included in the body of the report. Data for both age groups of 17-year-olds are provided in Appendixes A and B. Information on means and standard errors for all statistics in this report may be ordered from the National Assessment of Educational Progress.

An Overview of the 1979-80 Reading and Literature Assessment

This report is one of three that describe the results of the 1979-80 reading and literature assessment. The first of these described changes in the reading performance of American youth during the decade of the seventies. The second report described results obtained from the measurement of two objectives — valuing and responding to written works — developed for the third reading and literature assessment. That report discussed students' abilities to think and write about the kinds of responses they make to literary materials and detailed some of their perceptions of reading and related habits.

The current report presents results obtained from measurement of the remaining two of the four objectives that undergirded the reading and literature assessment conducted in 1979-80. These two objectives concern students' abilities to comprehend written works and to apply study skills in reading.

Taken together, these three reports describe changes in reading performance and the recent status of reading performance. Some significant findings about changes:

- Nationally, 9-year-olds' overall reading performance level rose 3.9%. They made significant gains in reference skills (4.8%), literal comprehension (3.9%) and inferential comprehension (3.5%).
- Nationally, 13-year-olds registered a significant increase in performance in literal comprehension from the first to the third assessment.
- Nationally, the performance level of 17-year-olds declined significantly (2.1%) in inferential comprehension.
- Three groups at each age — students in the Southeast, blacks and males — narrowed the gap between themselves and the nation, although they continued to perform below the national level.

From *Reading, Thinking and Writing* (1981), we learned:

> *. . . that while students learn to read a wide range of material, they develop very few skills for examining the nature of the ideas that they take away from their reading. Though most have learned to make simple inferences about such things as a character's behavior and motivation, for example, and can express their own judgments of a work as "good" or "bad," they generally did not return to the passage to explain the interpretations they made.*

Because the comprehension objective was the core of the reading and literature assessment, most

of this report is devoted to the presentation and discussion of results on the comprehension exercises. These results indicate that 58% of the 9-year-olds correctly responded to their exercises; 74% of the 13-year-olds and 79% of the in-school 17-year-olds correctly responded to their respective sets of exercises. These results are the benchmark against which changes in reading comprehension will be gauged during the next national assessment of reading. In addition to insights about the current status of reading comprehension, other findings also emerged from the 1979-80 reading and literature assessment. Here are some of them.

- Most students — 95% at age 9, 98% at ages 13 and 17 — thought it is very important to be able to read, but the percentages who enjoy reading very much decreased with age — 81% at age 9, 50% at age 13 and 42% at age 17.
- At all ages, students who read almost every day performed higher on the reading comprehension exercises than those who reported less frequent spare-time reading. However, the percentages of students who reported almost daily reading decreased with age — 54% at age 9, 35% at age 13 and 33% at age 17.
- At all ages, females performed above, and males below, the national levels of performance; also, they tended to read more frequently than males in their spare time. However, performance tended to be more similar for males and females who read the same amount of time than males and females generally.
- White students performed above the nation and black and Hispanic students performed below the nation at each age. However, at each age, black students who attend schools in advantaged-urban communities performed closer to national levels of performance than black students who attend schools in rural or in disadvantaged-urban communities.
- At age 9, more time spent watching television tended to be positively associated with achievement, except for the heaviest watchers, five hours or more. At age 13, performance increased with amount of television viewing up to the point of one to two hours and then decreased. At age 17, performance decreased with amount of television watching.
- At ages 13 and 17, increased time spent on homework tended to be associated with higher performance on the reading comprehension exercises.

Chapter 1

Perceptions, Habits and Experiences:

Do They Relate to the Reading Performance of American Students?

Yes, they do . . . with some unexpected outcomes.

National Assessment administered a series of background questions to students in the 1979-80 reading and literature assessment to probe their perceptions of reading, their reading habits and some of their experiences that may relate to reading performance. Percentages of students' responses to these questions were presented in the earlier report, *Reading, Thinking and Writing* (1981).

Here are the results when students' performance on the comprehension exercises are analyzed by the background data.

Students' Perceptions About Reading

Students were asked how important it is to be able to read, to indicate how much they enjoy reading and to describe the kind of reader they believe themselves to be. Here are some interesting results:

- Almost all students at ages 9, 13 and 17 thought reading is important, but fewer older students reported that they enjoy reading "very much."

Perceived importance and enjoyment are associated with comprehension in predictable ways:

those who enjoy and value it performed better than those who do not. The only minor exception to the rule was at age 9, where those who reported that they enjoy reading "somewhat" performed higher than those who reported that they enjoy reading "very much."

- At age 9, only a very small percentage of students described themselves as "poor" readers while almost 40% described themselves as "very good" readers. However, at ages 13 and 17, the percentage of those who described themselves as "poor" readers increased to about 5% while the percentage of those who described themselves as "very good" readers decreased to about one-fourth. These self-perceptions seem accurate because those who described themselves as poor readers performed 17 to 20% below the nation, while those who described themselves as "very good" readers performed 9 to 10% above the nation.

	9-Year-Olds (130 Exercises)		13-Year-Olds (102 Exercises)†		In-School 17-Year-Olds (122 Exercises)	
National mean % correct	58.2		74.5		79.1	
	Difference From Nation	% of Students §	Difference From Nation	% of Students §	Difference From Nation	% of Students §
How important is it to be able to read?						
It is very important.	0.8*	95.1	0.4*	98.2	0.4*	98.4
It is somewhat important.	−11.6*	3.8	−16.9*	1.4	−18.1*	1.2
It is not important at all.	−25.6*	0.6	−44.4*	0.2	−42.0*	0.2
How much do you enjoy reading?						
I enjoy it very much.	0.2	81.4	1.7*	49.7	4.7*	42.0
I enjoy it somewhat.	3.8*	15.1	−0.4	45.9	−2.5*	52.6
I do not enjoy it at all.	−16.6*	2.6	−12.5*	4.2	−11.4*	5.1
What kind of reader do you think you are for your age?						
A poor reader	−20.2*	2.6	−20.3*	5.1	−17.2*	6.2
A good reader	−1.0*	56.0	−1.4*	65.8	−1.6*	62.4
A very good reader	3.6*	38.3	9.7*	25.3	8.7*	28.8
I don't know.	−9.3*	2.8	−13.1*	3.5	−15.6*	2.2

† Only those booklets of exercises with the same background questions were used for 13-year-olds.

§ Percentages of students may not total 100% because nonresponses are not included.

** Asterisk indicates percentages statistically significant at the .05 level.*

Students' Reading Habits

Students were asked how often they read for their own enjoyment and the type of reading matter they select.

- Many more 9-year-olds than 13- or 17-year-olds reported reading "almost every day."
- At all ages, students who read "almost every day" performed significantly higher on the reading comprehension exercises than those who reported less frequent spare-time reading.
- Although more students at all ages reported reading both fiction and nonfiction, this was most evident at age 9 where nearly 50% read both fiction and nonfiction.
- At all ages, students who read fiction *and* nonfiction about equally and those who read mostly fiction performed higher on the reading comprehension exercises than those who read mostly nonfiction.

Edmund Farrell shared this observation, based on the data about students' preferred reading materials:

Students who do not read or who read nonfiction exclusively deprive themselves of those literary materials that seem critical to the education of the imagination and to higher-order skills of reading. Thus, it is not surprising that their performance is lower than those who read fiction and poetry or both fiction and nonfiction.

	9-Year-Olds (130 Exercises)		13-Year-Olds (102 Exercises)†		In-School 17-Year-Olds (122 Exercises)	
National mean % correct	58.2		74.5		79.1	
	Difference From Nation	% of Students §	Difference From Nation	% of Students §	Difference From Nation	% of Students §
How often do you read for your own enjoyment during your spare time?						
Almost every day	2.4*	53.6	4.7*	35.4	5.9*	32.7
Once or twice a week	1.0*	28.4	−0.5*	36.4	0.1	32.3
Less than once a week	−5.9*	12.4	−2.8*	20.6	−3.8*	26.7
Never#	−14.0*	5.3	−11.3*	7.4	−12.1*	8.0
Which one of the following statements best describes the kind of reading you do in your spare time?						
I never read during my spare time.#	−12.3*	7.8	−12.0*	10.0	−13.1*	10.8
I mostly read fiction; for instance, short stories, novels and plays.	1.4*	21.2	3.7*	30.1	3.1*	27.3
I mostly read nonfiction; for instance, books and articles about famous people, places, history, current events and hobbies.	−2.5*	23.4	−4.6*	22.9	−1.6*	30.3
I read fiction and nonfiction about equally.	2.8*	47.2	3.3*	36.6	3.6*	31.1

† Only those booklets of exercises with the same background questions were used for 13-year-olds.

§ Percentages of students may not total 100% because nonresponses are not included.

** Asterisk indicates percentages statistically significant at the .05 level.*

 # Because a small portion of students were not consistent in their responses, the percentages in the "never" categories of the two questions are different.

Some Experiences Related to Students' Reading Performance

Students at ages 9, 13 and 17 were asked how much time they spent watching television and reading on the day prior to participating in the national assessment. Assessments were conducted on all school days, Monday through Friday. Thirteen- and 17-year-olds were asked how much time they spent on homework on the prior day, and 9-year-olds were asked if they had attended kindergarten. Here are some of the highlights of students' experiences:

- Nine-year-olds who indicated that they watched television for up to three or four hours performed 5 percentage points above the nation on the reading comprehension exercises.
- At age 9, more time spent watching television tended to be positively associated with achievement, except for the heaviest watchers, five hours or more. At age 13, performance increased with amount of television watching up to the point of one to two hours and then decreased. At age 17, performance decreased with amount of television watching.

Commenting on these findings was David Pearson:

What may be operating here is an overall "stimulation" effect; it may be that moderate amounts of television watching still allow for independent reading time, and students' overall "verbal development" is facilitated by moderation in both. It is only when television viewing becomes excessive that deficits in achievement begin to show.

	9-Year-Olds (130 Exercises)		13-Year-Olds (102 Exercises)†		In-School 17-Year-Olds (122 Exercises)	
National mean % correct	58.2		74.5		79.1	
	Difference From Nation	% of Students §	Difference From Nation	% of Students §	Difference From Nation	% of Students §
How much television did you watch yesterday?						
None or less than 1 hour	1.5*	20.4	2.3*	22.2	2.3*	38.2
1 or 2 hours	3.0*	23.1	3.0*	28.2	1.3*	30.5
3 or 4 hours	5.2*	24.5	0.0	31.1	−2.2*	22.3
5 or more hours	−1.7*	25.6	−6.9*	17.1	−8.1*	8.1

† *Only those booklets of exercises with the same background questions were used for 13-year-olds.*

§ *Percentages of students may not total 100% because nonresponses are not included.*

* *Asterisk indicates percentages statistically significant at the .05 level.*

- At each age, most students — 59% of the 9-year-olds, 72% of the 13-year-olds, 75% of the 17-year-olds — indicated that they spent none or less than one hour reading for their own enjoyment. Yet, for each age, one or two hours of reading for one's enjoyment appears to be associated with higher performance than no reading or less than one hour of reading. However, 9- and 13-year-olds who indicated reading for enjoyment three or more hours performed below the nation.

	9-Year-Olds (130 Exercises)		13-Year-Olds (102 Exercises)†		In-School 17-Year-Olds (122 Exercises)	
National mean % correct	58.2		74.5		79.1	
	Difference From Nation	% of Students §	Difference From Nation	% of Students §	Difference From Nation	% of Students §
How much time did you spend reading just for your own enjoyment yesterday?						
None or less than 1 hour	2.3*	58.8	C.0	72.4	−0.8*	75.4
1 or 2 hours	3.9*	27.0	2.2*	20.5	3.2*	19.7
3 or more hours	−3.8*	13.2	−1.5*	5.6	1.1	4.2

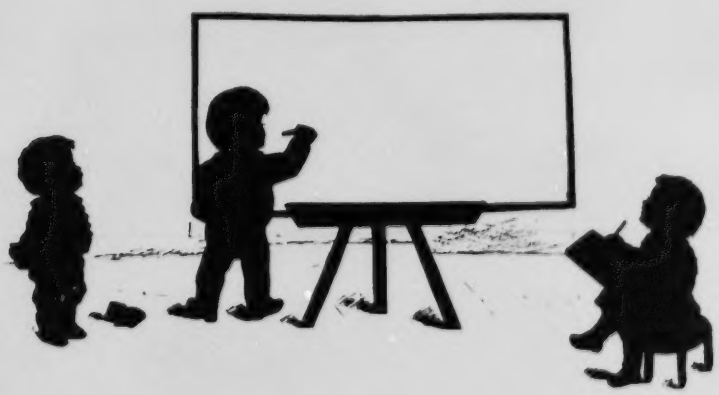
† *Only those booklets of exercises with the same background questions were used for 13-year-olds.*

§ *Percentages of students may not total 100% because nonresponses are not included.*

* *Asterisk indicates percentages statistically significant at the .05 level.*

- One-third of the 13-year-olds indicated that they spent less than one hour on homework, nearly one-fourth indicated that they spent between one and two hours on homework and 7% indicated spending more than two hours on homework. However, 29% of the 13-year-olds indicated that no homework had been assigned. This category of 13-year-olds performed below the nation, but not as far below as those who did not do their homework. **(See top of next page.)**
- Fewer than one-fourth of the 17-year-olds indicated spending either less than one hour or between one and two hours on homework, and only 9% of them indicated spending more than two hours on homework. However, 31% of the 17-year-olds indicated that no homework had been assigned, and this category of 17-year-olds performed below the nation.
- More 17-year-olds (13%) than 13-year-olds (6%) responded that they had homework but did not do it.
- Performance among 17-year-olds increased with increasing time spent on homework assignments. Performance among 13-year-olds went up from "less than one" to "between one and two hours." More than two hours did not seem to make any difference.

Members of the panel concurred that homework that includes reading assignments should be encouraged. Moreover, classes that have no homework do students a disservice.



	13-Year-Olds (102 Exercises)†		In-School 17-Year-Olds (122 Exercises)	
National mean % correct	74.5		79.1	
	Difference From Nation	% of Students §	Difference From Nation	% of Students §
How much time did you spend on homework yesterday?				
No homework was assigned.	−2.7*	29.1	−4.7*	31.5
I had homework but didn't do it.	−5.0*	5.9	0.8	12.8
Less than 1 hour	1.1*	33.1	1.3*	23.5
Between 1 and 2 hours	3.2*	24.1	2.9*	22.4
More than 2 hours	0.5	7.2	5.1*	9.3

†Only those booklets of exercises with the same background questions were used for 13-year-olds.

§ Percentages of students may not total 100% because nonresponses are not included.

** Asterisk indicates percentages statistically significant at the .05 level.*

- Most (85%) of the 9-year-olds indicated that they attended kindergarten, and these students performed above the nation on the reading comprehension exercises.
- Those 9-year-olds indicating that they had not attended kindergarten performed 14 percentage points below the nation.

	9-Year-Olds (130 Exercises)	
National mean % correct	58.2	
	Difference From Nation	% of Students §
Did you go to kindergarten?		
Yes, I went to kindergarten.	2.7*	85.4
No, I didn't go to kindergarten.	−14.1*	12.5

§ Percentages of students may not total 100% because nonresponses are not included.

** Asterisk indicates percentages statistically significant at the .05 level.*

Strickland remarked:

Access to kindergarten is important for reading. Emphasis on language development and experiences with literature are undoubtedly a desirable priority at this level. Although the percentage of students attending kindergarten is high, some states still do not mandate kindergarten.

Jaap Tuinman, considering the results on the background questions administered to 9-, 13- and 17-year-olds, commented:

The most appropriate educational action is to make sure that our youngest students can read well enough — that is, with sufficient accuracy and comprehension — so they learn to enjoy reading.

Given the results just described, a profile of the individual most likely to read with comprehension might look like this:

- Thinks reading is important
- Enjoys the act of reading
- Reads both fiction and nonfiction
- Reads for enjoyment almost daily
- Watches television moderately
- Spends some time on homework
- Attended kindergarten

Panel members concurred with this summary by Strickland:

> *When we consider that reading comprehension is largely dependent on the knowledge the reader brings to the text, it is not surprising that good readers read widely in their spare time and watch moderate amounts of television, too, for example. These youngsters are obviously adept at using a variety of resources to learn. They are not limited or bound to one medium. They are active consumers of information, and what they know helps them to acquire new knowledge. They have, in effect, learned how to learn on their own. No doubt, one of the most important roles of the school is to foster curiosity and independence in the learner along with the skills for learning.*

---

[1]In some cases, percentages presented in this report are not identical to those shown in *Reading, Thinking and Writing* because the percentages in this report were calculated for a subset of booklets that included the comprehension exercises and the background questions of interest.

Chapter 2

Comprehending Written Works:

Do American Students Understand What They Read?

Yes, they do . . . with some qualifications.

Interpreting and evaluating written works depend upon a reader's initial ability to both discover and create primary meaning in a text. Results from the 1979-80 reading and literature assessment suggest that many American students do grasp the primary meaning of reading materials. Data elicited through multiple-choice type exercises provide strong evidence for the assertion that many American youngsters read with comprehension. However, results presented in an earlier report, *Reading, Thinking and Writing* (1981), suggest that students are not nearly as successful at supporting their own multiple-choice selections in analyzing reading materials to deepen understanding or at evaluating the materials they read.

National and Group Results on All Comprehension Exercises

The mean percentage of correct responses for 9-year-olds on a total of 130 reading comprehension exercises was 58.2%; it was 74.0% for 13-year-olds on 156 exercises and 79.1% for 17-year-olds on 122 exercises. Thus, the set of exercises administered to the 9-year-olds was relatively more difficult when compared with the sets administered to 13- and 17-year-olds. Relative difficulty of the exercise sets must be taken into account when considering results for different age populations.[1] The performance of selected reporting groups relative to national performance is shown for each age population in Exhibits 1-3, respectively. Each bar in the exhibits represents the mean percentage of correct responses for a particular reporting group. The smaller bar within each bar extends two standard errors above and below the mean percentage for that group. The horizontal line across each graph represents the mean percentage of correct responses for the total age population, that is, national results for age 9, age 13 or age 17. Group abbreviations are explained in the introduction, and data represented in the exhibits are displayed in the tables in Appendix A.

Here are the highlights of group performance:

Region

- At age 9, students in the Northeast performed significantly above the nation, but at ages 13 and 17 they performed near the nation.
- Students in the Southeast performed significantly below the nation at ages 9, 13 and 17.

Sex

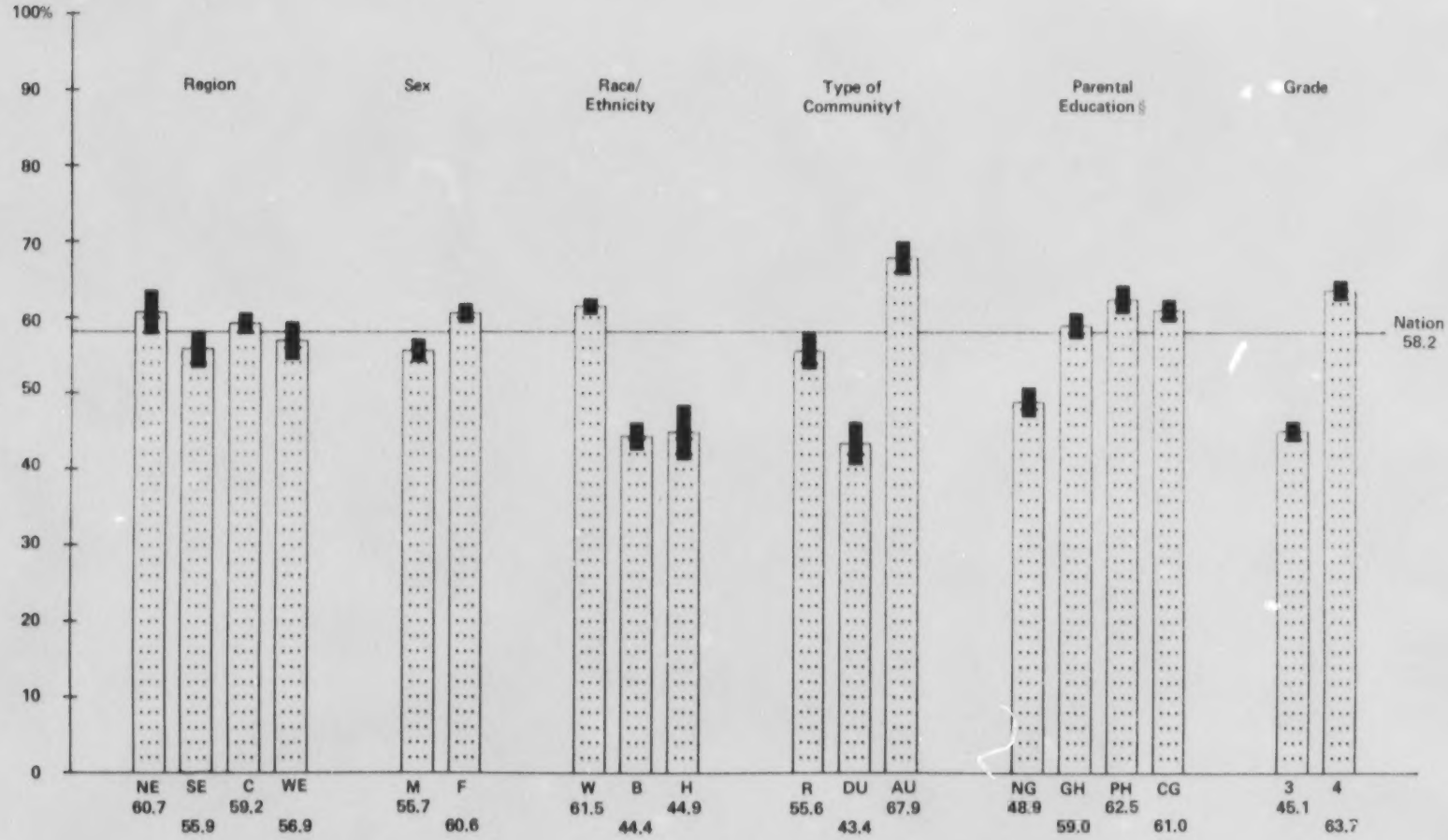
- Females performed significantly above, and males significantly below, the nation at all ages.

Race/Ethnicity

- White students performed significantly above, and black and Hispanic students significantly

Exhibit 1.

Mean Percentages of Correct Responses for Selected Groups on 130 Comprehension Exercises, 9-Year-Olds, 1979-80

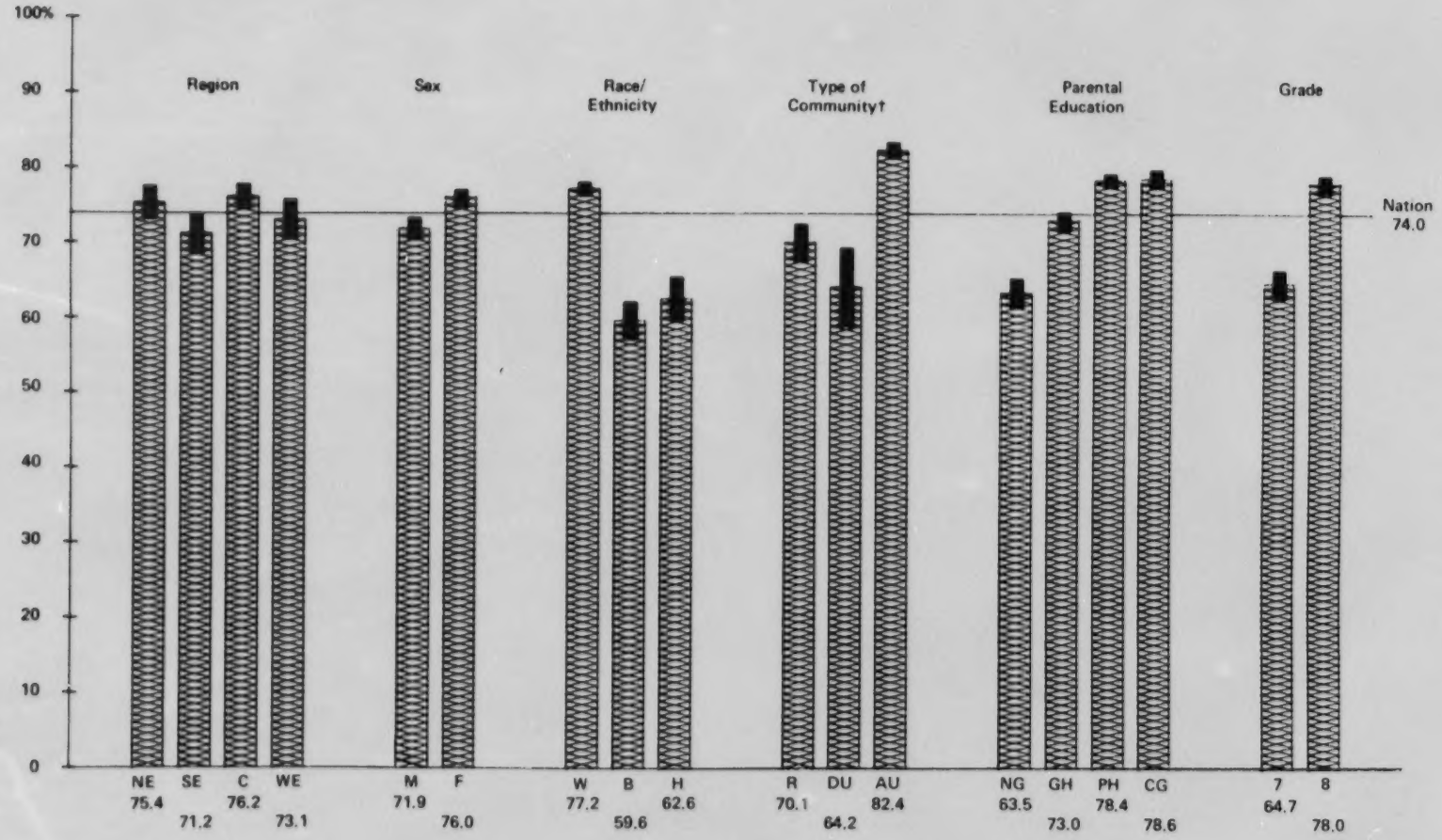


† *The type-of-community reporting variable represents only one-third of the sample.*

§ *23.8% of the 9-year-olds did not respond to the parental-education question.*

Exhibit 2.

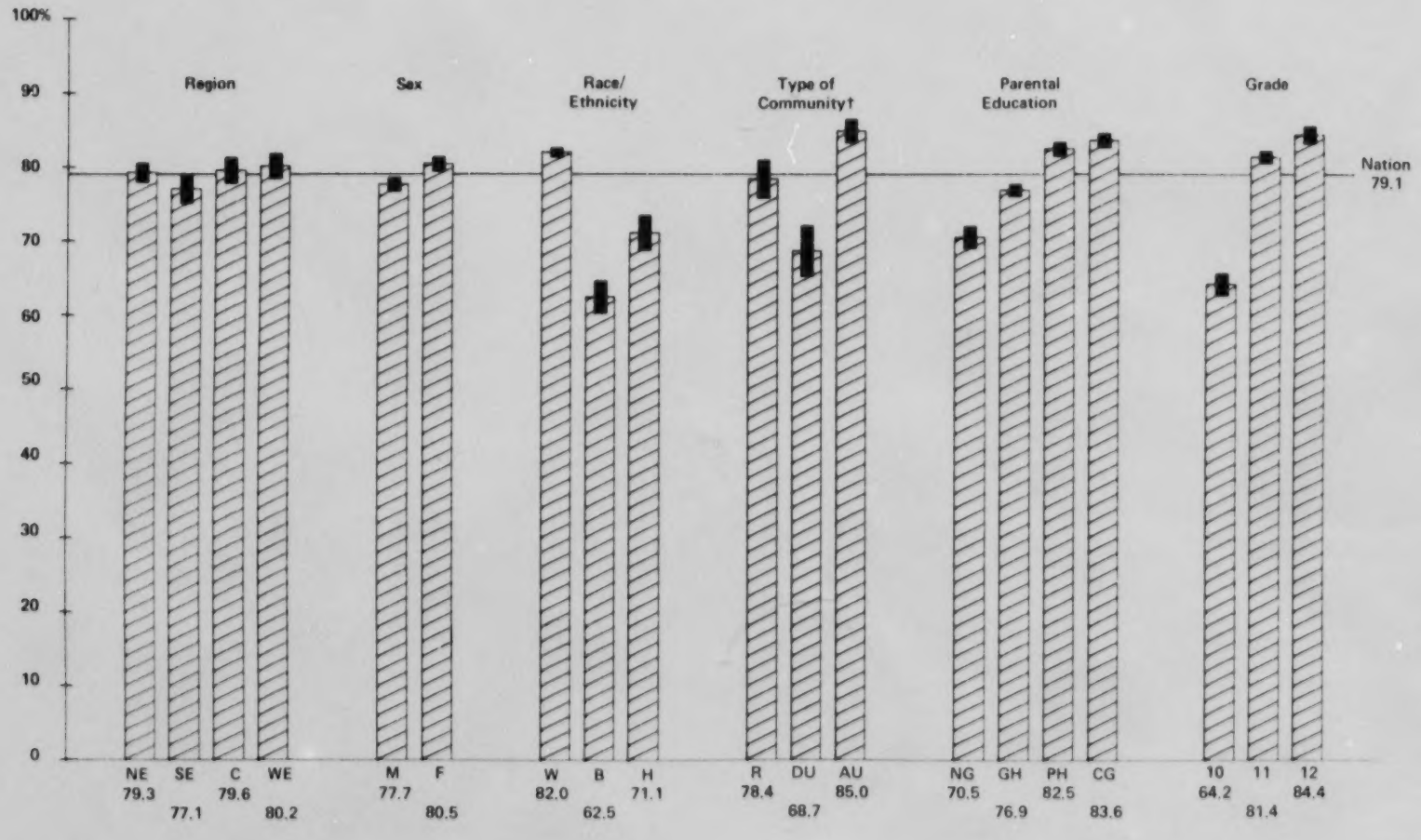
Mean Percentages of Correct Responses for Selected Groups on 156 Comprehension Exercises, 13-Year-Olds, 1979-80



† *The type-of-community reporting variable represents only one-third of the sample.*

Exhibit 3.

Mean Percentages of Correct Responses for Selected Groups on 122 Comprehension Exercises, In-School 17-Year-Olds, 1979-80



† The type-of-community reporting variable represents only one-third of the sample.

below, the nation at all ages. The gap between Hispanos and the nation decreased with age while the gap between blacks and the nation increased with age.

Type of Community

- Students who attend school in extreme-rural communities performed significantly below the nation at ages 9 and 13, but at age 17, they performed near the nation.
- Students who attend school in disadvantaged-urban communities performed below the nation at all three ages, though the gap narrowed by age 17.
- Students who attend school in advantaged-urban communities performed above the nation at all ages, though their advantage decreased with age.

Level of Parental Education

- Students whose parents have not graduated from high school performed significantly below the nation at all ages.
- Students who reported that at least one parent has had some post-high-school education or at least one parent who has graduated from college performed significantly above the nation at all ages.

Grade in School

- At all ages, students in or above the modal grade (4th, 8th and 11th grades) performed better than those in one grade below the modal grade.

Table 1 shows the results from the analysis[2] of male and female performance by amount of spare-time reading.

Although females performed above, and males below, the nation at each age on the reading comprehension exercises, data presented in Table 1 suggest that some of the difference in performance may be attributed to the amount of time boys and girls spend reading in their spare time. At all ages, females tend to read more than males in their spare time. The performance of males and females who read the same amount of time tended to be more similar than the performance of males and females overall. For example, at age 17, the performance of males and females who read almost every day is almost identical.

Male and female performance was analyzed by type of spare-time reading, and results are displayed in Table 2.

At all ages, more than twice as many boys as girls reported that they never read during their spare time. More girls than boys read mostly fiction, especially among teenagers. More males than females reported reading mostly nonfiction, and their percentage was double that of females at the junior and senior high levels. Slightly more girls than boys tend to read *both* fiction and nonfiction about equally.

At all ages, males who read mostly fiction performed higher than males who read mostly nonfiction. At ages 13 and 17, females who read mostly fiction performed higher than males who read mostly fiction. However, at ages 13 and 17, males who read mostly nonfiction performed higher than females who read mostly nonfiction.

While members of the interpretive panel were not surprised to find that frequent reading is related to reading comprehension (Table 1) for males as well as for females, they were somewhat surprised to see, at ages 13 and 17, that females who read mostly nonfiction are among the lower performing groups (Table 2).

Finally, male-female performance was analyzed by level of parental education, and these results, too, revealed some patterns of note. Results displayed in Table 3 show that increasing levels of parental education are associated with higher levels of performance. Moreover, differences between males and females decrease as level of parental education increases, particularly at ages 13 and 17, where males and females who have at least one parent who is a college graduate performed more similarly to each other than did males and females whose parents have less education.

Special analyses of black-white performance by levels of parental education and by type of community in which students attend school also provided a somewhat different picture of the performance differentials between these two

Table 1.

Mean Differences in Performance on Comprehension Exercises by Amount of Spare-Time Reading for 9-, 13- and In-School 17-Year-Old Males and Females, 1979-80†

	Mean % Difference	Mean % Difference		% of Students §	
		Male	Female	Male	Female
Age 9					
National mean % correct (58.2)		−2.5	2.5	50.0	50.0
Almost every day	2.4	−0.9	4.9	47.2	60.0
Once or twice a week	1.0	−0.4	2.7	30.8	26.0
Less than once a week	−5.8	−6.1	−5.2	14.2	10.6
Never	−14.0	−13.1	−16.5	7.6	3.1
Age 13					
National mean % correct (74.5)		−1.7	1.7	49.2	50.8
Almost every day	4.7	3.5	5.5	29.0	41.8
Once or twice a week	−0.5	−1.5	0.6	36.7	36.2
Less than once a week	−2.8	−3.3	−2.2	24.0	17.3
Never	−11.2	−11.9	−9.8	10.3	4.6
Age 17 (in-school)					
National mean % correct (79.1)		−1.4	1.4	50.0	50.0
Almost every day	5.9	5.8	6.0	29.0	36.4
Once or twice a week	0.1	−0.9	1.0	31.6	33.0
Less than once a week	−3.8	−4.8	−2.6	28.2	25.2
Never	−12.1	−13.2	−9.7	10.8	5.1

† Means and percentages presented in this table are slightly different from those presented elsewhere in the text. These differences are due to the fact that analyses for 13-year-olds were calculated only for booklets that contained all of the background variables of interest.

§ Percentages of students may not total 100% because nonresponses are not included.

groups of students. Table 4 displays the results of performance analyzed by levels of parental education for blacks and whites, and Table 5 shows performance analyzed by type-of-community school for blacks and whites.

Results in Table 4 indicate that higher levels of parental education are related to higher performance of students, but it appears to have the greatest impact on the performance of white students. Those white students who have neither parent with a high school diploma performed below the national levels. Black students whose parent(s) have higher levels of education performed below the national levels.

On the other hand, results presented in Table 5 indicate that at all ages black students who attend schools in advantaged-urban communities performed closer to national levels of performance than those who attend school in rural or in disadvantaged communities.

Pearson said about these findings:

Taken together, the data in Tables 4 and 5 reveal an interesting performance difference

Table 2.

Mean Differences in Performance on Comprehension Exercises by Type of Spare-Time Reading for 9-, 13- and In-School 17-Year-Old Males and Females, 1979-80†

	Mean % Difference	Mean % Difference		% of Students §	
		Male	Female	Male	Female
Age 9					
National mean % correct (58.2)		−2.5	2.5	50.0	50.0
Never read in spare time	−12.3	−12.1	−12.8	10.4	5.3
. . . mostly fiction	1.4	−1.8	4.4	20.5	21.9
. . . mostly nonfiction	−2.5	−3.2	−1.5	26.9	19.8
. . . fiction and nonfiction about equally	2.8	0.3	4.8	41.7	52.8
Age 13					
National mean % correct (74.5)		−1.7	1.7	49.2	50.8
Never read in spare time	−12.0	−13.1	−9.6	13.6	6.5
. . . mostly fiction	3.7	0.0	5.8	22.5	37.6
. . . mostly nonfiction	−4.8	−2.8	−7.9	30.2	15.8
. . . fiction and nonfiction about equally	3.4	3.2	3.5	33.3	39.9
Age 17 (in-school)					
National mean % correct (79.1)		−1.4	1.4	50.0	50.0
Never read in spare time	−13.1	−13.8	−11.7	14.7	6.8
. . . mostly fiction	3.1	0.7	4.2	17.3	37.2
. . . mostly nonfiction	−1.6	−0.6	−3.6	41.2	19.5
. . . fiction and nonfiction about equally	3.6	3.4	3.8	26.1	36.1

† *Means and percentages presented in this table are slightly different from those presented elsewhere in the text. These differences are due to the fact that analyses for 13-year-olds were calculated only for booklets that contained all of the background variables of interest.*

§ *Percentages of students may not total 100% because nonresponses are not included.*

between blacks and whites. While for whites, parent(s)' level of education seems to be a potent factor in explaining differences among achievement profiles, type of community is the more potent factor in explaining differences among black students. Put differently, if you are white, **who** *you live with makes more difference than* **where** *you live; whereas for blacks,* **where** *you attend school makes more difference than* **who** *you live with. These data should be used by those reviewing the effectiveness of integration.*

[1]The results discussed in this report were substantiated by transforming the data to a logit scale. This transformation tends to minimize the ceiling and floor effects encountered when analyzing data at different difficulty levels.

[2]All main effects and interactions discussed in this chapter were found to be significant using analysis of variance techniques.

Table 3.

Mean Differences in Performance on Comprehension Exercises by Level of Parental Education for 9-, 13- and In-School 17-Year-Old Males and Females, 1979-80†

	Mean % Difference	Mean % Difference		% of Students §	
		Male	Female	Male	Female
Age 9#					
National mean % correct (58.2)		−2.5	2.5	50.0	50.0
Not graduated high school	−9.1	−13.0	−5.7	5.0	5.6
Graduated high school	0.9	−2.7	4.2	14.6	15.8
Post high school	4.4	2.1	6.5	10.2	10.5
Graduated college	2.9	0.3	5.9	48.2	42.4
Age 13					
National mean % correct (74.5)		−1.7	1.7	49.2	50.8
Not graduated high school	−10.3	−13.1	−7.7	10.0	11.2
Graduated high school	−0.5	−2.8	1.6	25.7	27.1
Post high school	4.3	2.4	6.1	15.7	16.0
Graduated college	4.5	3.7	5.4	39.0	37.0
Age 17 (in-school)					
National mean % correct (79.1)		−1.4	1.4	50.0	50.0
Not graduated high school	−8.6	−11.2	−6.5	10.8	14.4
Graduated high school	−2.2	−4.0	−0.4	30.5	30.4
Post high school	3.4	2.0	4.6	16.6	18.4
Graduated college	4.6	3.5	5.8	38.4	34.1

† Means and percentages presented in this table are slightly different from those presented elsewhere in the text. These differences are due to the fact that analyses for 13-year-olds were calculated only for booklets that contained all of the background variables of interest.

§ Percentages of students may not total 100% because nonresponses are not included.

 # 23.8% of the 9-year-olds did not respond to the parental-education question.

Table 4.

Mean Differences in Performance on Comprehension Exercises by Level of Parental Education for 9-, 13- and In-School 17-Year-Old White and Black Students, 1979-80†

	Mean % Difference	Mean % Difference		% of Students §	
		White	Black	White	Black
Age 9#					
National mean % correct (58.2)		3.4	−13.8	79.0	14.0
Not graduated high school	−9.1	−4.9	−21.5	4.7	5.7
Graduated high school	0.9	3.4	−10.1	15.8	13.5
Post high school	4.4	6.9	−9.7	10.9	8.2
Graduated college	2.9	6.6	−12.9	45.4	48.4
Age 13					
National mean % correct (74.5)		3.2	−14.4	79.7	13.5
Not graduated high school	−10.3	−6.6	−21.1	8.8	12.2
Graduated high school	−0.5	−1.4	−12.5	27.6	22.7
Post high school	4.3	6.3	−10.0	16.9	13.0
Graduated college	4.5	7.7	−13.2	39.3	37.5
Age 17 (in-school)					
National mean % correct (79.1)		3.8	−15.2	82.5	12.2
Not graduated high school	−8.6	−4.2	−19.7	9.9	22.4
Graduated high school	−2.2	0.3	−17.8	31.0	29.8
Post high school	3.4	5.2	−9.9	18.4	13.9
Graduated college	4.6	6.5	−12.9	38.5	26.0

† Means and percentages presented in this table are slightly different from those presented elsewhere in the text. These differences are due to the fact that analyses for 13-year-olds were calculated only for booklets that contained all of the background variables of interest.

§ Percentages of students may not total 100% because Hispanos and others and nonresponses are not included.

 # 23.8% of the 9-year-olds did not respond to the parental-education question.

Table 5.

Mean Differences in Performance on Comprehension Exercises by Type-of-Community School‡ for 9-, 13- and In-School 17-Year-Old White and Black Students, 1979-80†

	Mean % Difference	Mean % Difference		% of Students §	
		White	Black	White	Black
Age 9					
National mean % correct (58.2)		3.2	−13.8	79.0	14.0
Rural	−2.5	0.2	−19.9	10.6	7.1
Disadvantaged urban	−14.7	−5.8	−17.7	2.1	28.1
Advantaged urban	9.8	10.9	−2.8	12.2	6.7
Age 13					
National mean % correct (74.5)		3.2	−14.4	79.7	13.5
Rural	−3.8	−0.9	−21.3	11.1	8.1
Disadvantaged urban	−9.1	2.6	−17.2	3.9	24.8
Advantaged urban	7.4	8.6	−2.3	12.1	8.9
Age 17 (in-school)					
National mean % correct (79.1)		3.8	−15.2	82.5	12.2
Rural	−0.7	2.2	−24.4	8.9	6.5
Disadvantaged urban	−10.4	−1.6	−18.0	4.8	32.7
Advantaged urban	5.9	6.6	−5.8	13.7	2.8

‡ *Type of community represents about one-third of the sample.*

† *Means and percentages presented in this table are slightly different from those presented elsewhere in the text. These differences are due to the fact that analyses for 13-year-olds were calculated only for booklets that contained all of the background variables of interest.*

§ *Percentages of students may not total 100% because Hispanos and others and nonresponses are not included.*

Chapter 3

Comprehension Tasks

For the 1979-80 assessment of reading and literature, the comprehension exercises were divided into four groups: (1) those assessing comprehension of words; (2) those assessing comprehension of lexical relationships; (3) those assessing comprehension of propositional relationships; and (4) those assessing comprehension of textual relationships. This is not intended to represent a hierarchy of skills or the sequence by which comprehension is acquired and/or developed in readers. Rather, it is a useful way of organizing the assessment exercises so that a variety of comprehension tasks can be addressed.

Examples of the various passages and the exercises designed to measure comprehension of word meanings and lexical, propositional and textual relationships are displayed in Appendix C.

A Description of the Comprehension Tasks

Words

Comprehending words requires more than a knowledge of their dictionary meanings. A dictionary shows several meanings for most words, and, more importantly, words are often used idiomatically or in unusual or poetic ways. So comprehending words involves understanding a full range of possible meanings, many of which may be derived from the context in which words are used.

Exercises measuring students' understanding of word meanings were of three types: (1) the meaning of a word is gained by reading the text, (2) the meaning is gained through the reader's prior knowledge, (3) the meaning of the word is gained through a mixture of both the text and the reader's prior knowledge.

Lexical Relationships

Another aspect of comprehension is understanding how one word might be linked to another — the lexical relationships. One word might relate to another as an actor relates to an action or a cause relates to an effect or an owner relates to a possession. For example, the pronoun "she" might relate to an earlier word, "Mary."

Exercises used to measure students' understanding of lexical relationships were of two types: literal, which are explicitly stated relationships, and referential, where the meaning requires some referencing to people, places or things previousiy mentioned in the text.

Propositional Relationships

Comprehension also involves understanding how various ideas are related to one another. Developers of the objectives and exercises for the 1979-80 reading and literature assessment chose to describe the units of meaning in a text in terms of propositions. A proposition typically takes the form of a sentence or a clause in a sentence. However, neither words, clauses nor complete sentences necessarily impart the full meaning, although some facets of the message may be stated explicitly. One way to test comprehension is to see if readers understand explicit and implicit propositions.

Propositions, themselves, may be related to one another in various ways. For instance, one proposition, "The car would not start," may be related to an earlier proposition, "Bill forgot to put gas in the car." In addition to causal relationships, there are others such as temporality (one event follows another), instrumentality (one event serves as a means for accomplishing another) and comparisons and contrasts (similarities or differences between events or states). Often a propositional relationship is expressed by two adjacent propositions; however, the relationship may be established by more than two propositions. The relationship may be established within a single paragraph or across several paragraphs.

In this assessment, propositional relationships are limited to understanding the implied relationships between two or more propositions within a focused part of the text — within a single paragraph or adjacent paragraphs. Explicit statements of propositional relationships are categorized as lexical literal exercises. Propositional relationships that are implied strongly by the text material are categorized as text-based propositional relationships, and those that require the reader to draw extensive inferences or to apply his or her own knowledge or experience to the text are categorized as reader-based propositional relationships.

Textual Relationships

The major difference between comprehending propositional and textual relationships is the amount of text a reader is required to read before the correct relationships can be discerned. Textual relationships are established across paragraphs and sometimes across an entire text. For purposes of this assessment, textual relationships include implied relationships established across much of the text. A poem, for instance, does not directly state its meaning.

Meanings are derived by understanding the purpose of the work, relating the work to personal experience or knowledge and inferring the relationships among the propositions. Included in comprehension of textual relationships are many aspects of understanding usually associated with literary works, such as character, mood, theme and interpretations of meaning. Other types of textual relationships are more often associated with expository texts, such as main idea and purpose. Many types of explanatory relationships (such as generalizations, implications, predictions) are prevalent in both literary and expository texts.

Textual relationships that are strongly suggested by the text, especially those that are implied repeatedly in many ways, are categorized as text-based. Textual relationships that require the readers to draw extensive inferences or to apply their own knowledge or experience to the text are categorized as reader-based.

National and Group Results on the Comprehension Tasks

Table 6 shows the national results on the comprehension tasks described in the previous sections. More detailed performance results for the comprehension tasks are in Appendix A. Readers are reminded that these results are not comparable across ages because each age population was administered exercises appropriate to it.

The mean percentages of correct responses (Table 6) indicate that exercises that measured word comprehension tended to be the most difficult task for 9- and 13-year-olds. However, word comprehension and textual relationships seemed to share the same degree of difficulty for the 17-year-olds. Although the differences between and among the exercise types are not significant in all cases, the general pattern is the same for all three age populations.

Table 6.

National Mean Percentages of Correct Responses for All Comprehension Exercises and Comprehension Tasks, 9-, 13- and In-School 17-year-Olds, 1979-80

	9-Year-Olds		13-Year-Olds		17-Year-Olds	
	Mean % Correct	Number of Exercises	Mean % Correct	Number of Exercises	Mean % Correct	Number of Exercises
All comprehension exercises	58.2	130	74.0	156	79.1	122
Comprehending tasks:						
Word meanings	46.5	13	69.1	21	75.9	17
Textual relationships	54.3	40	70.5	50	75.8	50
Propositional relationships	58.7	49	76.0	54	82.5	33
Lexical relationships	68.1	28	79.2	31	83.8	22

Group results by tasks are presented in Tables A-1, A-3 and A-5 of Appendix A. What is perhaps most notable about performance results for the reporting groups is that their positions relative to national levels of performance are similar to those found on the total pool of comprehension exercises. This pattern was not altered by the classification of exercises into task groups. One exception to this, however, is that at all ages, females and males performed more similarly on word meanings than on comprehension as a whole. At ages 13 and 17, females and males performed more differently on lexical relationships than on comprehension as a whole.

The following groups at all ages performed above the nation on the comprehension tasks:

- Females
- Whites
- Students who attend school in advantaged-urban communities
- Students who have at least one parent with some post high school education or one parent who is a college graduate
- Students who are in the modal grade

These groups at all ages performed below the nation on the comprehension tasks:

- Southeast
- Males

- Blacks
- Hispanos
- Students who attend school in disadvantaged-urban communities
- Students who are one grade below the modal grade
- Students who reported that neither parent has graduated high school

Chapter 4

Comprehending Different Types of Passages

Students' performance was analyzed by the type of passage they were required to read as well as by the type of task upon which the exercises focused. Developers of the assessment wished to see if performance varied with different types of reading materials. Passages were described as expository or as literary. Expository passages are those that primarily provide information for the reader. Literary passages are creative and expressive and thus involve an aesthetic component; the acquisition of information is a secondary issue in these passages. Within each of these major passage types, a further distinction was made among informative, evaluative and functional exposition; and the literary passages were classified as poems, tales and other kinds of prose.

Examples of the passage types and their accompanying exercises are in Appendix C. This chapter presents results only for the major passage types, while Appendix A provides results for the major passage types and the subcategories of passages as well.

Table 7 shows the mean percentages of correct responses for each age on the expository and literary passages.

At each age, performance is higher on the exercises accompanying the literary passages than on those accompanying the expository passages. However, the performance difference between the two types of exercises may be due to varying difficulty of the material and/or the type of questions asked. Jaap Tuinman remarked:

> *There is a relatively large difference in performance at each age between expository and literary passages. To me, the explanation does not lie in the fact that particular sets of expository and/or literary materials were used: the difference in performance reflects a difference in the kinds of comprehension skills required by the type of materials read.*

Some of the expository and literary passages were followed by a question asking students how much they liked reading the passage. Five response options were presented to 13- and 17-year-olds: I liked it very much; I liked it; I can't decide; I disliked it; and I disliked it very much. Nine-year-olds were presented only three response options: I liked it; I disliked it; and I can't decide. For analysis purposes, at ages 13 and 17, the two "liking" options and the two "disliking" options were combined. Performance results on the expository and literary types of exercises were analyzed by these response options. Results are displayed in Table 8.

At all ages, those students who responded that they liked the passages clearly performed higher than those who were undecided or who disliked the passages.

Table 7.

National Mean Percentages of Correct Responses for Comprehension Exercises With Expository and Literary Passages, 9-, 13- and In-School 17-Year-Olds, 1979-80

	9-Year-Olds		13-Year-Olds		In-School 17-Year-Olds	
	Mean % Correct	Number of Exercises	Mean % Correct	Number of Exercises	Mean % Correct	Number of Exercises
All comprehension exercises	58.2	130	74.0	156	79.1	122
Passage types:						
Expository	56.8	68	72.1	92	77.4	73
Literary	59.6	62	76.6	64	81.6	49

Table 8.

Mean Percentages of Correct Responses for 9-, 13- and In-School 17-Year-Olds on Comprehension Exercises With Expository and Literary Passages by Students' Feelings About the Passages, 1979-80

			Liked the Passage		Disliked the Passage		Undecided About the Passage	
	# of Passages	# of Exercises	Mean % Correct	% of Students†	Mean % Correct	% of Students†	Mean % Correct	% of Students†
Age 9								
All passages	19	59	59.7	77.8	49.7	7.2	50.7	14.6
Expository	9	28	57.7	74.4	47.5	8.5	47.7	16.6
Literary	10	31	61.6	80.9	51.8	6.0	53.4	12.8
Age 13								
All passages	19	70	76.2	74.6	69.3	12.1	70.0	13.1
Expository	10	38	75.2	75.1	68.1	11.1	69.7	13.5
Literary	9	32	77.3	73.9	70.8	13.2	70.3	12.7
Age 17 (in-school)								
All passages	10	39	78.8	66.2	66.5	19.3	68.1	14.2
Expository	7	28	76.7	64.4	64.4	20.2	66.1	15.0
Literary	3	11	84.2	70.2	72.0	17.2	73.2	12.1

† *Percentages of students may not total 100% because nonresponses are not included.*

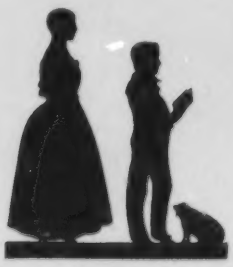
Passage Types: How Do Groups Perform?

Here are some highlights from Tables A-2, A-4 and A-6 in Appendix A. Certain groups of students at each age consistently performed above the nation on both types of passages.

- Females
- Whites
- Students who attend school in advantaged-urban communities
- Students who have at least one parent who either has some post-high-school education or who is a college graduate
- Students who are in or above (17-year-olds) the modal grade

Certain other groups of students at each age consistently performed below the nation on both types of passages.

- Males
- Blacks and Hispanos
- Students who attend school in disadvantaged-urban communities
- Students who reported that neither parent has graduated from high school
- Students in less than the modal grade



As discussed in Chapter 2, more females than males correctly responded to the reading comprehension exercises. However, males performed more similarly to females on the expository passages than on the literary passages. Members of the interpretive panel found this result interesting since the expository passages are perhaps more difficult to comprehend than the literary passages. Discussants thought this finding might be associated with the general tendency of males to read nonfiction.

Edmund Farrell offered this comment about male-female performance differences and the tendency of males to prefer nonfiction to fiction.

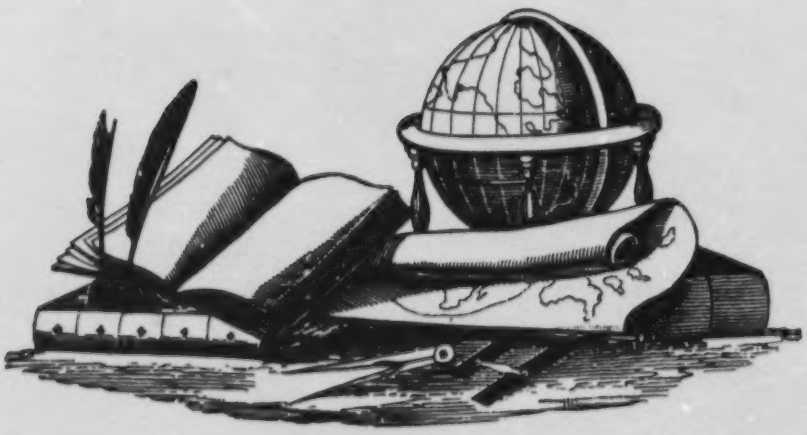
> *"Reading literature" is considered a feminine activity in our society, so boys tend not to read as much as girls. Also, boys tend not to like typical girls' books or stories, while girls tend to read both "boy" and "girl" books. Moreover, the great majority of students rarely encounter male teachers in the elementary schools or male English teachers in the secondary schools. Boys are often deprived of male models who value the reading of literature as an important, rewarding masculine activity.*

Concurring, Dorothy Strickland added:

> *Voluntary reading of a wide variety of expository and literary works enhances all aspects of reading achievement. The findings indicate a need for reading programs that expose students to a variety of literature consistently and systematically through the grades. Such programs should stress the role of literature as a functional and aesthetic resource in the lives of children.*

Chapter 5

Applying Study Skills in Reading



Reading seems to be facilitated by the use of various approaches to gathering and digesting information from printed material. For example, good readers are able to use reference materials efficiently and are able to adjust their rate of reading to suit the purpose for which they are reading. Recognizing the impact of a variety of approaches on comprehension, developers of the reading and literature assessment included a set of exercises designed to measure students' facility with certain study skills typically introduced in school, but which may be used in a variety of settings.

Three broad areas of study skills were distinguished. These were not thought to be definitive or exhaustive. Following is a brief list of the three broad study skills areas assessed in 1979-80 and questions illustrating what these skills areas involve. Examples of these exercises are displayed in Appendix C.

Charts and graphs. Do students use visual aids when reading? Can students correctly interpret information given on a chart, map or graph?

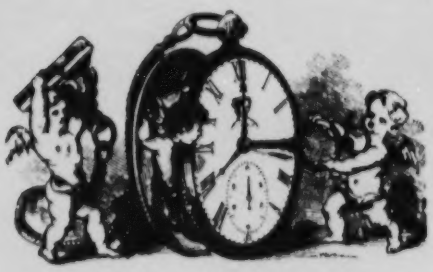
Book parts. Do students use different parts of a book to find information (for example, title page, preface, table of contents, footnotes, index, bibliography, glossary and appendix)? Can students use the different parts of a book to find specific information?

Library and reference materials. Do students use various reference materials (for example, dictionaries, encyclopedias, library card catalogs, abstracts, bibliographies, directories, periodicals and indexes)? Can students find specific information from reference materials?

In addition to these three study skills areas, developers added another broad area to take into account the fact that students use various techniques to aid their studying, such as outlining, notetaking, headings and summaries. Also, students adjust their reading speed to meet their specific purposes. For example, students often *skim* a story to gain an overall impression or they may *scan* an article to locate specific information. Some exercises were administered to each age population to measure facility with technique and adjustment of reading rate. These exercises were classified in the assessment as "skim and scan."

National Results on Skim/Scan Exercises

The skim/scan objective was measured with a smaller pool of exercises than that used to measure the other objectives. The time limits set for these administrations were short enough to ensure that most readers would not have sufficient time to thoroughly read the passage but should have time to skim and scan relevant parts of the passage to answer their respective sets of exercises.



At age 9, students were required to scan a menu to determine answers to three exercises pertaining to the menu's content. Percentages of correct responses were 65.3, 70.0 and 82.3, respectively, to the three exercises.

A page from a telephone directory, used as a skim/scan passage, was administered to 13- and 17-year-olds. It, too, was used to obtain answers to three exercises. Results showed the expected age-related performance increase. For 13-year-olds, the percentages of correct responses on the three exercises were 65.9, 70.7 and 49.4, respectively. For 17-year-olds, the percentages of correct responses were 80.8, 83.4 and 71.7, respectively.

In addition to those three exercises, 13- and 17-year-olds were each administered a different long, expository passage. Thirteen-year-olds were asked 25 questions about the passage administered to them, and 17-year-olds were asked 30 questions about the passage they were administered. Overall, the mean percentage of correct responses at age 13 was 43.2% and at age 17, 38.3%.

Fewer than 28% of the 13-year-olds responded to their final (25th) exercise, and fewer than 9% of the 17-year-olds responded to their final (30th) exercise. In addition, only 0.3 of 1% at age 17 answered all exercises correctly, while at age 13, only 0.1 of 1% answered all exercises correctly. At age 13, females performed above the nation, but at age 17, no male-female performance differences were evident.

National and Group Results on the Study Skills Exercises

National results on the study skills exercises are displayed in Table 9. The long skim/scan exercises results are not included in the table or in the discussion that follows.

Exhibits 4, 5 and 6 show how selected reporting groups performed on the total collection of study skills exercises relative to the national level of performance for 9-, 13- and 17-year-olds, respectively. (Also see the tables in Appendix B.)

Some groups performed above, and some below, the nation at all ages on the total set of study skills exercises. Groups that performed above the nation are:

- Females
- Whites
- Those who attend school in advantaged-urban communities
- Those who have at least one parent who has had education beyond high school
- Modal grade

Groups that performed below the nation are:

- Males
- Blacks and Hispanos
- Those who attend school in disadvantaged-urban communities
- Those who have neither parent graduated from high school
- Less than modal grade

When group results on the study skills exercises are compared with group results on the comprehension exercises, it is apparent that patterns of performance are remarkably similar. Although the mean percentage of correct responses on each of these sets of exercises differs, the relative standing of the various groups to national levels of performance is quite stable (see Exhibits 1-3 and Exhibits 4-6).

David Pearson and Jaap Tuinman pointed out that many reading specialists and educators have characterized "study skills" as somehow different from the corpus of skills employed by the reader in over-

Table 9.

National Mean Percentages Correct for All Study Skills Exercises and Categories of Study Skills, 9-, 13- and In-School 17-Year-Olds, 1979-80

	9-Year-Olds		13-Year-Olds		In-School 17-Year-Olds	
	Mean % Correct	Number of Exercises	Mean % Correct	Number of Exercises	Mean % Correct	Number of Exercises
All study skills exercises	64.4	53†	67.2	69†	78.8	68†
Categories of study skills exercises:						
Charts and graphs	67.6	11	69.0	22	80.7	22
Book parts	57.6	10	64.8	19	77.0	19
Library and reference material	64.8	29	68.0	25	78.6	24

† These totals include some exercises that are not classified as charts and graphs, book parts or library and reference material.

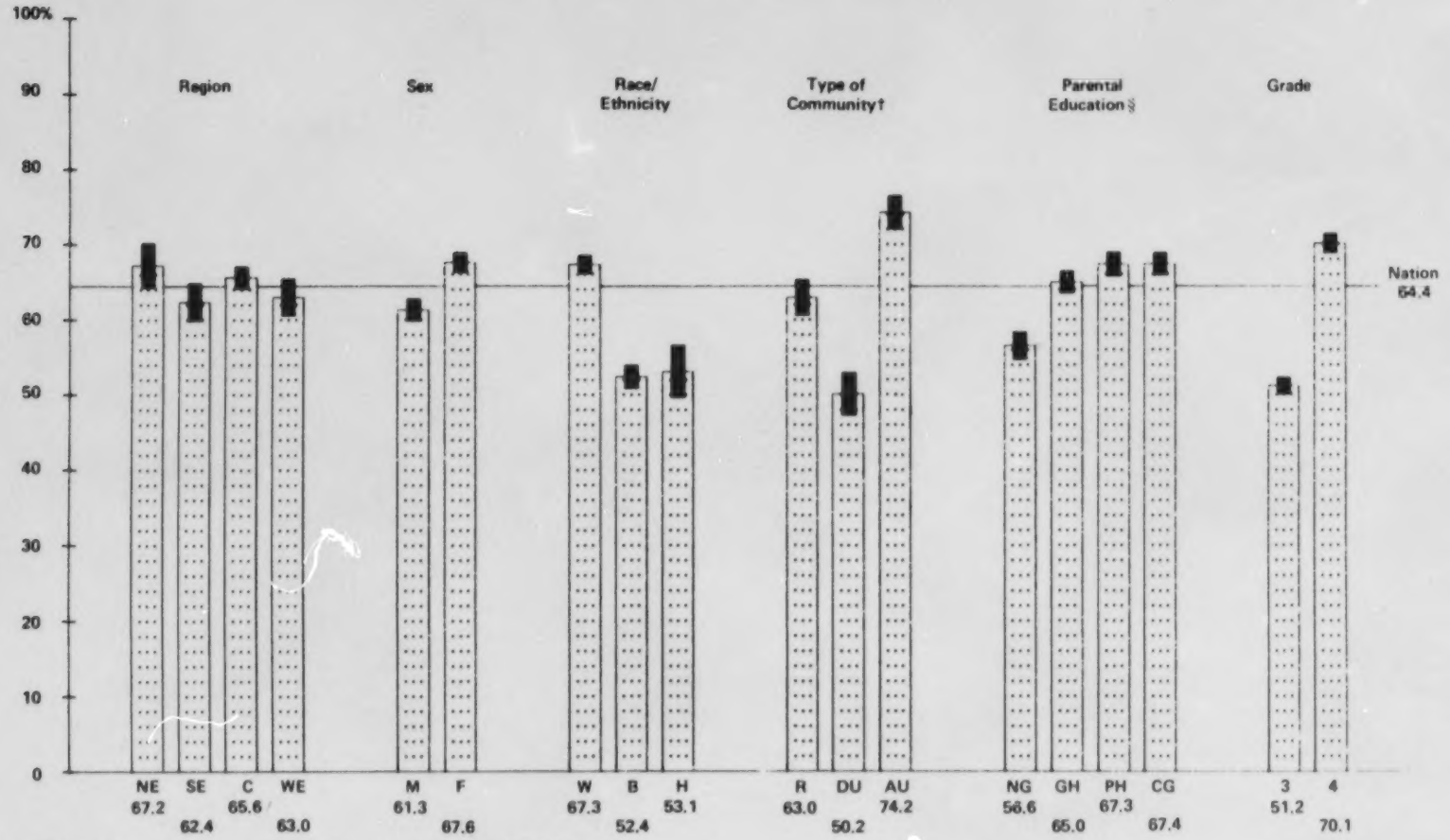
all comprehending. Many teachers approach study skills in the curriculum as separate and distinct from general reading. However, as Tuinman remarked:

> *An important contribution from this assessment is the finding that the reading exercises appear to tap a unitary dimension, no matter how the exercises themselves may be classified.*

This finding appears to lend support to the thesis that comprehension is an integrated, holistic cognitive process, difficult to segment into independent sets of subskills. Although the development of comprehension proficiency in students may be aided by some means of classifying or distinguishing between reading tasks, in practice, the reader engages in an interactive process wherein comprehension is attained through the operation of several cognitive skills.

Exhibit 4.

Mean Percentages of Correct Responses for Selected Groups on 53 Study Skills Exercises, 9-Year-Olds, 1979-80

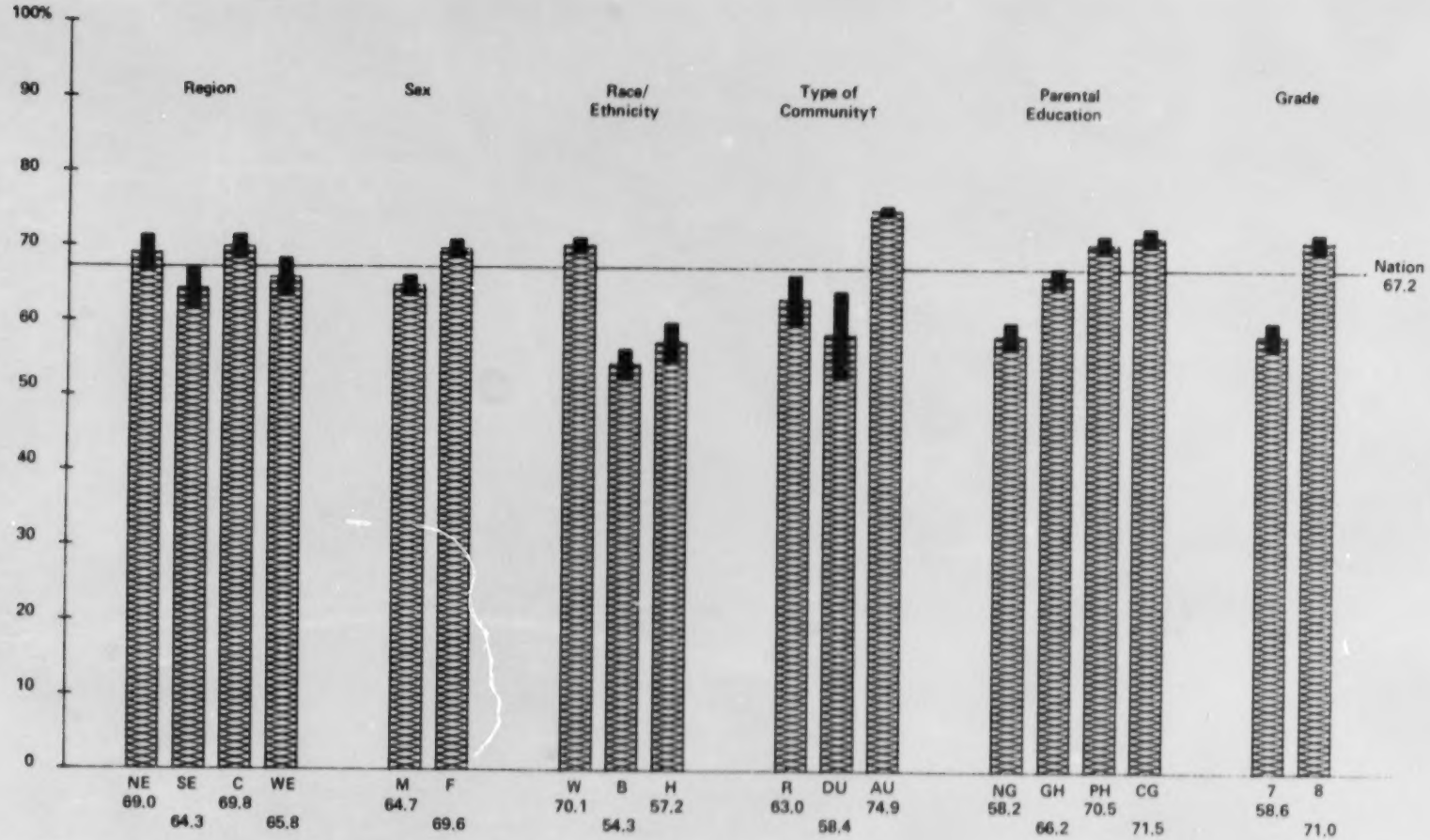


† *The type-of-community reporting variable represents only one-third of the sample.*

§ *23.8% of the 9-year-olds did not respond to the parental-education question.*

Exhibit 5.

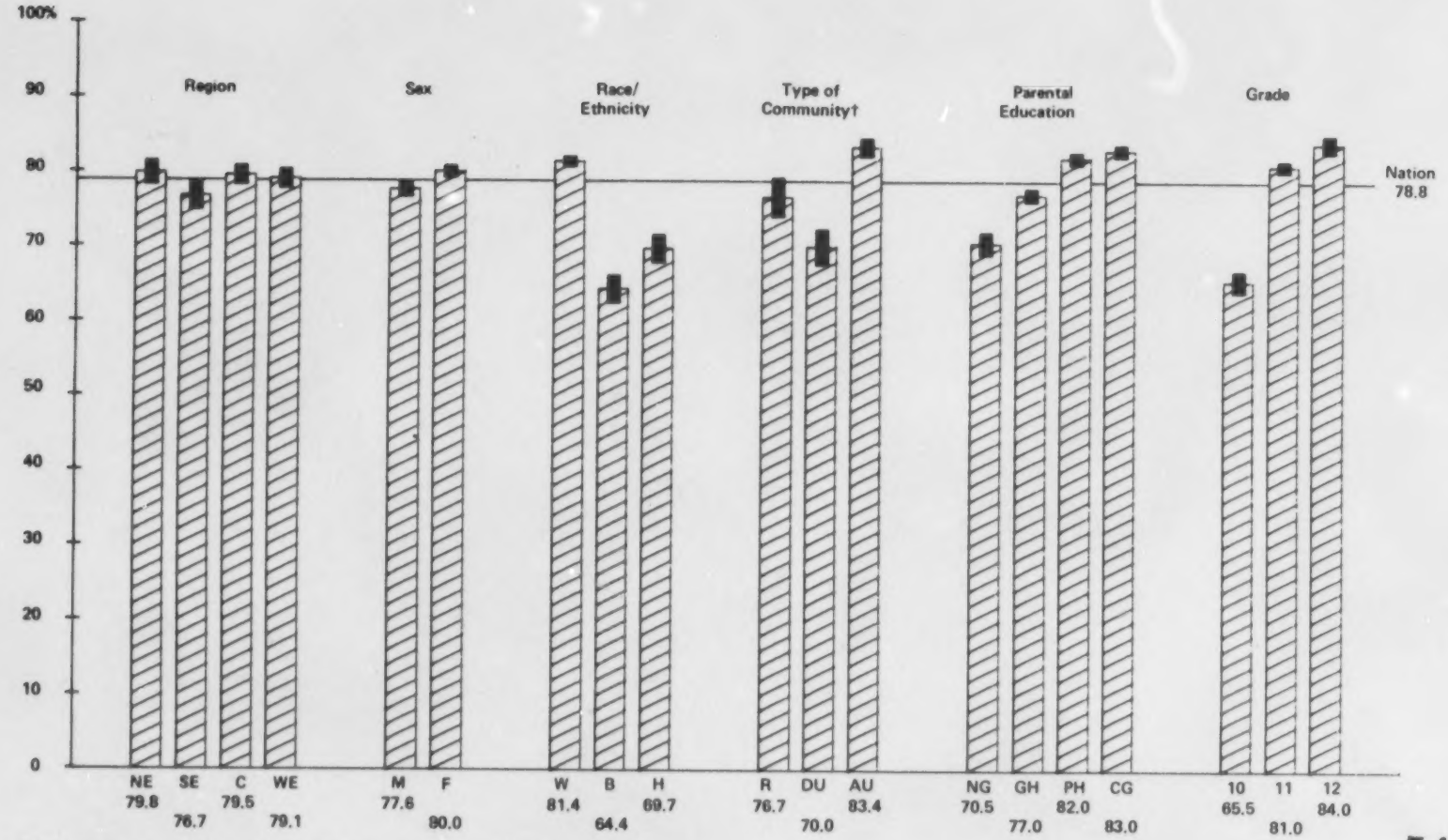
Mean Percentages of Correct Responses for Selected Groups on 69 Study Skills Exercises, 13-Year-Olds, 1979-80



† *The type-of-community reporting variable represents only one-third of the sample.*

Exhibit 6.

Mean Percentages of Correct Responses for Selected Groups on 68 Study Skills Exercises, In-School 17-Year-Olds, 1979-80



† *The type-of-community reporting variable represents only one-third of the sample.*

Chapter 6

Conclusion

This report began with the question, "Do [students] understand what they read?" Results presented here suggest that the answer is yes . . . with certain qualifications: Yes, if all they need to do is select from multiple choices and yes . . . if they are members of certain groups.

Following is a synthesis of dialogue between the educators participating in a review of the results of findings from the 1979-80 reading and literature assessment.

David Pearson made the following observations about performance differences between groups.

> *We appear to be doing a better job for high-risk students in the early years than we are in the middle or secondary years. The question then becomes, "What is different about early years versus later years?" First, elementary schools are significantly smaller than are secondary schools. Second, while it is true that federal monies targeted for disadvantaged students are dispersed across grade levels, the bulk of these resources go to early intervention programs. Third, modal instructional strategies change across grade levels: small group instruction is more popular in the earlier years, while larger group or independent assignment formats are more popular in later years. Also, during the early years, reading assignments tend to receive more instructional support (e.g., vocabulary development, building of background knowledge, extensive interrogation about the text) than later on.*

Discussants agreed that certain factors are essential in stimulating students' achievement — not only in reading, but in all subject areas. Various studies (Shoemaker and Fraser, 1981, pp. 178-182) of what contributes to effective schools often cite the same factors such as (1) strong and assertive leadership in the school, (2) an orderly school climate, (3) high expectations of students by the principals and teachers and (4) the use of instructional objectives to guide the learning program and testing and evaluation to monitor status and progress.

Farrell pointed out that George Weber's (1971, p. 1) study, testing the hypothesis that schools make a difference, noted that effective schools also place a strong, early emphasis on reading.

Tuinman remarked:

> *Common sense, research and National Assessment data say that if a child learns to read poorly at the outset, s/he will slide down the hill in all likelihood. The common expectation that large groups of children* **will** *fail to become fluent, independent readers at the end of grade 1 or 2 is extraordinarily damaging. A key concern, perhaps, is the reeducation of*

teachers, parents and publishers so that the expectation of failure does not become the norm.

Concurring with Tuinman, Pearson also emphasized the challenges facing secondary schools in the 1980s, as public expectations and demands for educational improvement increase. He commented:

Leaders in secondary education should consider the opportunity provided by these data to take a close look at the organization and instructional practices in secondary schools. Smaller schools, smaller instructional groups, more support for remedial reading and more teacher support for reading assignments are among the options for change that secondary schools have.

In concluding their dialogue, panelists concurred on the importance of several points:

- Emphasis on early reading attainment is important in developing enjoyment of reading and reading comprehension among students.
- Students profit from exposure to a wide variety of genre and styles.
- Homework that includes reading assignments should be encouraged: classes that have no homework do students a disservice.
- Instructional strategies, such as size of work groups, teaching materials and approaches, need to be reconsidered in light of the research on effective schools and in light of the high proportion of students who, at the secondary school level, are not continuing to demonstrate the potential they evidenced in elementary school.

The importance of assessment data in understanding and diagnosing current levels of students' achievement was underscored by those attending the interpretive conference. Large-scale assessment, as opposed to localized competency-testing programs, provides national data, in light of which states and local communities can establish relevant instructional directions and objectives.

However, they also pointed out that this assessment is not based on a set of ideal criteria or fixed standards for reading achievement. Rather, it is a representative sample of material typically taught and assessed at the target age levels. Thus, while we can accurately compare and contrast performance among the various groups and categories of materials, the best means of evaluating the progress of any particular group is to compare that group's achievement with its own past performance. And, that is what will happen as the National Assessment continues to assess the reading performance of America's youth.

Appendix A

Summary Results for the Nation and Reporting Groups on Reading Comprehension Exercises, 1979-80 Reading and Literature Assessment

Table A-1.

National Mean Percentages Correct and Mean Group Differences for 9-Year-Olds on Comprehension Exercises by Tasks, 1979-80

	All Comprehension (130 Exercises)	Words (13 Exercises)	Words Text-Based (2 Exercises)	Words Mixed (5 Exercises)	Words Reader-Based (6 Exercises)	Lexical (28 Exercises)	Lexical Literal (10 Exercises)	Lexical Referential (18 Exercises)	Propositional (49 Exercises)	Propositional Text-Based (35 Exercises)	Propositional Reader-Based (14 Exercises)	Textual (40 Exercises)	Textual Text-Based (21 Exercises)	Textual Reader-Based (19 Exercises)
Nation	58.15	46.51	51.95	48.64	42.91	68.12	69.77	67.21	58.66	59.53	56.49	54.32	57.28	51.04
Region														
Northeast	2.58*	3.01*	2.67	3.15*	3.01*	3.90*	3.81*	3.95*	2.45	2.48	2.37*	1.69	1.37	2.05
Southeast	−2.24*	−1.55	−1.96	−1.68	−1.30	−1.65	−1.77	−1.58	−2.55*	−2.45*	−2.79*	−2.50*	−2.53*	−2.48*
Central	1.09	0.99	1.82	0.96	0.75	0.74	0.80	0.71	1.21	1.50	0.48	1.24	1.50	0.94
West	−1.20	−1.97	−2.52	−1.94	−1.82	−2.61*	−2.51	−2.66*	−0.88	−1.27	0.10	−0.37	−0.40	−0.34
Sex														
Male	2.49*	−0.99*	−1.99*	−0.91	−0.72	−2.60*	−2.97*	−2.40*	−3.00*	−3.30*	−2.26*	−2.26*	−2.23*	−2.30*
Female	2.47*	1.01*	2.07*	0.97*	0.70	2.63*	3.02*	2.41*	2.96*	3.25*	2.23*	2.23*	2.22*	2.24*
Race/ethnicity														
White	3.36*	3.24*	3.64*	2.82*	3.46*	3.52*	3.53*	3.52*	3.37*	3.39*	3.33*	3.27*	3.47*	3.04*
Black	−13.79*	−12.74*	−15.39*	−11.84*	−12.62*	−13.93*	−14.03*	−13.88*	−14.24*	−14.28*	−14.13*	−13.49*	−14.21*	−12.69*
Hispanic	−13.28*	−13.88*	−13.59*	−9.75*	−17.43*	−15.13*	−14.90*	−15.26*	−12.94*	−13.11*	−12.51*	−12.20*	−12.73*	−11.62*
Type of community†														
Rural	−2.54*	−2.52	−3.36	−2.07	−2.62	−1.17	−2.50	−0.43	−3.06*	−3.60*	−1.67	−2.88*	−2.81*	−2.96*
Disadvantaged urban	−14.72*	−13.55*	−19.11*	−10.64*	−14.12*	−15.36*	−13.82*	−16.21*	−14.83*	−14.02*	−16.85*	−14.51*	−15.36*	−13.57*
Advantaged urban	9.78*	8.72*	12.44*	7.38*	8.59*	9.43*	10.33*	8.93*	10.68*	10.55*	11.00*	9.26*	9.69*	8.80*
Size of community														
Big cities	3.44*	3.56*	−1.89	−3.20*	−4.43*	−3.51*	−2.54	−4.04*	−3.55*	−3.62*	−3.38	−3.22*	−2.70*	−3.79*
Fringes around big cities	3.21*	2.38	2.09	2.01	2.80*	3.57*	3.49	3.62*	3.57*	3.82*	2.94*	2.79*	2.62*	2.98*
Medium cities	−0.42	0.06	3.99	0.07	−1.27	−0.74	−0.68	−0.77	−0.27	−0.01	−0.92	−0.56	−1.54	0.53
Small places	0.21	0.46	−1.23	0.59	0.91	0.24	0.03	0.36	0.06	−0.10	0.47	0.31	0.47	0.13
Parental education														
Not graduated high school	−9.21*	−9.22*	−14.04*	−7.58*	−8.98*	−9.79*	−9.58*	−9.91*	−9.22*	−8.82*	−10.23*	−8.80*	−9.84*	−7.65*
Graduated high school	0.88	0.84	0.28	1.59	0.40	1.18	1.36	1.08	0.76	0.75	0.80	0.83	0.72	0.95
Some post high school	4.36*	5.66*	9.60*	4.88*	4.99*	3.99*	2.51	4.82*	5.10*	5.37*	4.42*	3.30*	2.86*	3.79*
Graduated college	2.90*	3.34*	4.50*	2.26*	3.86*	2.60*	2.63*	2.59*	2.87*	2.77*	3.14*	3.01*	3.04*	2.98*
Grade														
3	−13.07*	−11.94*	−16.28*	−9.44*	−12.58*	−14.47*	−13.67*	−14.91*	−13.47*	−13.81*	−12.60*	−11.97*	−12.53*	−11.35*
4	5.59*	5.09*	6.78*	3.89*	5.53*	6.21*	6.17*	6.24*	5.69*	5.92*	5.10*	5.20*	5.53*	4.84*
Achievement class														
Lowest quarter	−31.21*	−26.30*	−37.61*	−22.27*	−25.89*	−33.91*	−35.91*	−32.80*	−32.35*	−33.18*	−30.28*	−29.52*	−31.22*	−27.64*
Middle-lowest quarter	−7.19*	−9.25*	−11.26*	−8.63*	−9.11*	−4.38*	−4.79*	−4.15*	−7.53*	−7.28*	−8.18*	−8.05*	−7.84*	−8.29*
Middle-highest quarter	10.55*	7.12*	11.73*	5.12*	7.24*	13.08*	14.87*	12.09*	10.75*	11.46*	8.98*	9.64*	10.44*	8.75*
Highest quarter	27.80*	28.37*	37.05*	25.73*	27.68*	25.16*	25.77*	24.83*	29.09*	28.95*	29.43*	27.87*	28.55*	27.13*

* Asterisk indicates percentages statistically significant at the .05 level.

† This population group represents about one-third of the sample.

Table A-2.

National Mean Percentages Correct and Mean Group Differences for 9-Year-Olds on Comprehension Exercises by Passage Type, 1979-80

	All Comprehension (130 Exercises)	Expository (68 Exercises)	Expository Informative (34 Exercises)	Expository Evaluative (17 Exercises)	Expository Functional (17 Exercises)	Literary (62 Exercises)	Literary Tales (28 Exercises)	Literary Other Prose (23 Exercises)	Literary Poems (11 Exercises)
Nation	58.15	56.83	59.28	51.59	57.19	59.59	63.55	57.05	54.79
Region									
Northeast	2.58*	3.04*	3.27*	1.42	4.22*	2.08	2.26	2.09	1.60
Southeast	−2.24*	−2.15	−1.63	−1.97	−3.31*	−2.34*	−2.82*	−1.66	−2.55*
Central	1.09	1.06	0.38	1.96	1.54	1.13	1.27	0.93	1.18
West	−1.20	−1.61	−1.71	−1.24	−1.77	−0.76	−0.53	−1.35	−0.13
Sex									
Male	−2.49*	−2.07*	−1.76*	−1.51*	−3.26*	−2.94*	−2.65*	−2.99*	−3.58*
Female	2.47*	2.06*	1.75*	1.52*	3.22*	2.92*	2.60*	3.03*	3.49*
Race/ethnicity									
White	3.36*	3.30*	3.37*	3.34*	3.15*	3.42*	3.33*	3.53*	3.42*
Black	−13.79*	−13.74*	−13.6*	−14.37*	−13.38*	−13.85*	−13.97*	−13.93*	−13.38*
Hispano	−13.28*	−12.95*	−13.70*	−11.98*	−12.41*	−13.64*	−12.77*	−14.61*	−13.81*
Type of community†									
Rural	−2.54*	−2.42	−1.73	−2.86	−3.38	−2.67*	−2.90	−1.74	−4.01*
Disadvantaged urban	−14.72*	−14.77*	−15.68*	−13.21*	−14.51*	−14.66*	−15.25*	−14.09*	−14.33*
Advantaged urban	9.78*	10.55*	11.50*	9.72*	9.48*	8.94*	8.30*	10.20*	7.90*
Size of community									
Big cities	−3.44*	−3.70*	−4.00*	−3.78*	−3.01*	−3.15*	−3.43*	−2.50*	−3.82*
Fringes around big cities	3.21*	3.71*	3.39*	3.96*	4.09*	2.67*	3.53*	1.43	3.07*
Medium cities	−0.42	−0.94	−1.34	−0.44	−0.61	0.13	0.68	−1.26	1.65
Small places	0.21	0.25	0.60	0.16	−0.36	0.17	−0.19	0.75	−0.10
Parental education									
Not graduated high school	−9.21*	−9.70*	−9.34*	−9.46*	−10.67*	−8.68*	−9.09*	−8.00*	−9.06*
Graduated high school	0.88	0.68	1.09	−0.49	1.03	1.10	1.24	1.04	0.89
Some post high school	4.36*	5.10*	5.52*	4.47*	4.89*	3.55*	3.83*	3.70*	2.55*
Graduated college	2.90*	2.92*	2.70*	3.76*	2.53*	2.89*	3.04*	2.96*	2.35*
Grade									
3	−13.07*	−13.00*	−12.78*	−12.16*	−14.29*	−13.14*	−14.20*	−12.76*	−11.27*
4	5.59*	5.51*	5.46*	4.96*	6.15*	5.68*	5.79*	5.87*	5.00*
Achievement class									
Lowest quarter	−31.21*	−30.99*	−31.39*	−30.06*	−31.14*	−31.45*	−31.83*	−32.36*	−28.59*
Middle-lowest quarter	−7.19*	−7.51*	−6.67*	−9.82*	−6.86*	−6.84*	−5.47*	−7.58*	−8.77*
Middle-highest quarter	10.55*	10.46*	10.82*	9.29*	10.91*	10.65*	11.51*	10.39*	8.98*
Highest quarter	27.80*	28.00*	27.20*	30.54*	27.05*	27.58*	25.73*	29.46*	28.34*

* *Asterisk indicates percentages statistically significant at the .05 level.*

† *This population group represents about one-third of the sample.*

Table A-3.

National Mean Percentages Correct and Mean Group Differences for 13-Year-Olds on Comprehension Exercises by Tasks, 1979-80

	All Comprehension (156 Exercises)	Words (21 Exercises)	Words Text-Based (4 Exercises)	Words Mixed (9 Exercises)	Words Reader-Based (8 Exercises)	Lexical (31 Exercises)	Lexical Literal (13 Exercises)	Lexical Referential (18 Exercises)	Propositional (54 Exercises)	Propositional Text-Based (37 Exercises)	Propositional Reader-Based (17 Exercises)	Textual (50 Exercises)	Textual Text-Based (23 Exercises)	Textual Reader-Based (27 Exercises)
Nation	73.95	69.13	68.66	69.40	69.07	79.21	74.64	82.51	76.03	77.91	71.94	70.48	72.49	68.77
Region														
Northeast	1.39	1.66	1.85	1.97	1.21	1.82*	2.44*	1.38	1.38	1.53	1.06	1.03	0.73	1.29
Southeast	-2.71*	-3.01*	-4.62*	-1.87	-3.48*	-2.63*	-1.94	-3.12*	-2.48	-2.33	-2.81*	-2.87*	-2.95*	-2.80*
Central	2.26*	2.47*	2.84*	1.88*	2.94*	1.65*	0.59	2.41*	2.37*	2.25*	2.64*	2.43*	2.24*	2.60*
West	-0.87	-1.13	-0.40	-1.92	-0.62	-0.73	-0.74	-0.72	-1.11	-1.26	-0.77	-0.58	0.04	-1.10
Sex														
Male	-2.09*	-1.65*	-0.37	-1.29*	-2.71*	-2.37*	-2.55*	-2.24*	-1.97*	-2.23*	-1.39*	-2.23*	-1.85*	-2.55*
Female	2.04*	1.64*	0.40	1.25*	2.70*	2.30*	2.48*	2.18*	1.92*	2.18*	1.36*	2.18*	1.80*	2.50*
Race/ethnicity														
White	3.28*	3.75*	3.11*	3.69*	4.13*	2.72*	2.58*	2.82*	3.36*	3.28*	3.51*	3.34*	3.16*	3.49*
Black	-14.34*	-15.85*	-13.97*	-15.11*	-17.61*	-11.95*	-11.33*	-12.39*	-14.68*	-14.26*	-15.58*	-14.81*	-14.36*	-15.20*
Hispano	-11.38*	-14.05*	-10.90*	-14.50*	-15.13*	-9.64*	-9.39*	-9.82*	-11.60*	-11.82*	-11.12*	-11.11*	-10.59*	-11.56*
Type of community†														
Rural	-3.88*	-2.81	-4.85*	-3.59*	-0.91	-3.59*	-4.20*	-3.14*	-4.36*	-4.69*	-3.63*	-3.99*	-4.02*	-3.96*
Disadvantaged urban	-9.77*	-10.53*	-8.29*	-9.14*	-13.22*	-8.25*	-6.77*	-9.32*	-11.32*	-11.33*	-11.30*	-8.72*	-7.75*	-9.54*
Advantaged urban	8.49*	9.48*	8.93*	8.68*	10.66*	6.96*	6.83*	7.05*	8.20*	7.75*	9.18*	9.34*	8.56*	10.00*
Size of community														
Big cities	-3.72*	-4.52*	-2.49	-3.38	-6.83*	-2.48*	-1.76	-3.00*	-3.33*	-3.38*	-3.22*	-4.57*	-4.23*	-4.87*
Fringes around big cities	2.05	2.21	3.49*	1.04	2.88	1.30	0.72	1.72	1.81	1.83	1.78	2.70*	2.59*	2.79*
Medium cities	0.40	0.00	-1.80	0.30	0.56	0.66	0.03	1.11	0.71	0.76	0.59	0.09	0.19	0.00
Small places	0.11	0.30	-0.53	0.46	0.54	0.08	0.31	-0.09	-0.01	0.01	-0.04	0.17	0.19	0.16
Parental education														
Not graduated high school	-10.46*	-12.08*	-9.13*	-13.36*	-12.12*	-9.17*	-9.68*	-8.80*	-10.68*	-10.47*	-11.15*	-10.34*	-9.66*	-10.92*
Graduated high school	-0.92*	-0.93	-0.06	-1.68*	-0.52	-0.48	-0.55	-0.43	-0.81	-0.49	-1.49*	-1.30*	-1.28*	-1.32*
Some post high school	4.47*	4.46*	3.56*	5.15*	4.12*	3.73*	3.31*	4.04*	4.53*	4.38*	4.87*	4.87*	4.44*	5.23*
Graduated college	4.67*	5.53*	4.13*	6.14*	5.53*	3.93*	4.26*	3.69*	4.50*	4.20*	5.15*	4.94*	5.04*	4.86*
Grade														
7	-9.27*	10.19*	-10.71*	-8.99*	-11.28*	-8.11*	-7.26*	-8.73*	-9.81*	-9.82*	-9.81*	-9.00*	-8.67*	-9.28*
8	4.07*	4.41*	4.41*	3.92*	4.96*	3.68*	3.48*	3.82*	4.30*	4.30*	4.31*	3.91*	3.71*	4.08*
Achievement class														
Lowest quarter	-29.25*	-31.09*	-29.59*	-30.88*	-32.07*	-25.87*	-25.67*	-26.01*	-30.22*	-29.76*	-31.21*	-29.52*	-28.71*	-30.21*
Middle-lowest quarter	-2.27*	-3.77*	-1.60	-4.65*	-3.86*	-0.92	-2.43*	0.18	-1.56*	-0.72	-3.34*	-3.27*	-3.28*	-3.27*
Middle-highest quarter	10.63*	10.84*	9.02*	11.57*	10.94*	9.39*	8.56*	10.00*	11.45*	11.56*	11.21*	10.43*	10.27*	10.57*
Highest quarter	20.87*	24.00*	22.18*	23.94*	24.99*	17.38*	19.49*	15.86*	20.28*	18.88*	23.31*	22.36*	21.72*	22.91*

* *Asterisk indicates percentages statistically significant at the .05 level.*

† *This population group represents about one-third of the sample.*

Table A-4.

National Mean Percentages Correct and Mean Group Differences for 13-Year-Olds on Comprehension Exercises by Passage Type, 1979-80

	All Comprehension (156 Exercises)	Expository (92 Exercises)	Expository Informative (30 Exercises)	Expository Evaluative (40 Exercises)	Expository Functional (22 Exercises)	Literary (64 Exercises)	Literary Tales (35 Exercises)	Literary Other Prose (21 Exercises)	Literary Poems (8 Exercises)
Nation	73.95	72.13	71.85	69.56	77.21	76.57	75.82	78.07	75.91
Region									
Northeast	1.39	1.53	1.90	1.12	1.79	1.20	1.04	1.75	0.45
Southeast	-2.71*	-2.90*	-3.48*	-2.51*	-2.82*	-2.42	-2.25	-2.92*	-1.89
Central	2.26*	2.33*	2.95*	1.95*	2.17*	2.16*	1.85*	2.53*	2.57*
West	-0.87	-0.87	-1.24	-0.50	-1.04	-0.86	-0.59	-1.21	-1.08
Sex									
Male	-2.09*	-1.59*	-0.64*	-1.69*	-2.70*	-2.81*	-2.18*	-3.37*	-4.06*
Female	2.04*	1.57*	0.61*	1.67*	2.68*	2.73*	2.12*	3.29*	3.93*
Race/ethnicity									
White	3.28*	3.28*	3.33*	3.44*	2.93*	3.27*	3.23*	3.24*	3.48*
Black	-14.34*	-14.47*	-14.65*	-15.35*	-12.62*	-14.14*	-14.10*	-13.94*	-14.87*
Hispano	-11.38*	-11.33*	-11.73*	-11.55*	-10.40*	-11.46*	-11.31*	-11.36*	-12.35*
Type of community†									
Rural	-3.88*	-3.82*	-2.26	-4.80*	-4.15*	-3.96*	-3.95*	-3.12*	-6.24*
Disadvantaged urban	-9.77*	-10.09*	-10.27*	-10.30*	-9.47*	-9.31*	-8.96*	-9.58*	-10.14*
Advantaged urban	8.49*	8.84*	9.07*	9.25*	7.77*	8.00*	9.05*	5.88*	8.96*
Size of community									
Big cities	-3.72*	-3.18*	-3.51*	-3.20*	-2.69	-4.50*	-5.11*	-3.36*	-4.81*
Fringes around big cities	2.05	1.98	2.40*	1.60	2.10	2.14*	2.48*	1.34	2.79
Medium cities	0.40	0.30	0.40	0.38	0.02	0.55	0.74	0.44	0.00
Small places	0.11	0.00	0.16	0.00	-0.22	0.27	0.20	0.47	0.03
Parental education									
Not graduated high school	-10.46*	-11.08*	-10.73*	-11.75*	-10.35*	-9.57*	-9.62*	-9.64*	-9.14*
Graduated high school	-0.92*	-0.91*	-0.59	-1.24*	-0.75	-0.93*	-1.52*	-0.15	-0.36
Some post high school	4.47*	4.26*	4.55*	4.06*	4.21*	4.78*	5.09*	4.13*	5.16*
Graduated college	4.67*	4.93*	4.98*	5.22*	4.34*	4.29*	4.60*	3.98*	3.71*
Grade									
7	-9.27*	-9.48*	-9.95*	-9.07*	-9.60*	-8.96*	-8.83*	-9.09*	-9.18*
8	4.07*	4.16*	4.24*	4.06*	4.23*	3.93*	3.87*	4.01*	4.02*
Achievement class									
Lowest quarter	-29.25*	-29.01*	-29.17*	-29.81*	-27.33*	-29.59*	-30.08*	-28.66*	-29.92*
Middle-lowest quarter	-2.27*	-3.21*	-3.79*	-3.63*	-1.63*	-0.93	-1.45	-0.39	-0.12
Middle-highest quarter	10.63*	10.34*	10.82*	10.02*	10.28*	11.05*	11.40*	10.61*	10.67*
Highest quarter	20.87*	21.86*	22.17*	23.39*	18.67*	19.45*	20.12*	18.37*	19.37*

* *Asterisk indicates percentages statistically significant at the .05 level.*

† *This population group represents about one-third of the sample.*

Table A-5.

National Mean Percentages Correct and Mean Group Differences for In-School 17-Year-Olds on Comprehension Exercises by Tasks, 1979-80

	All Comprehension (122 Exercises)	Words (17 Exercises)	Words Text-Based (5 Exercises)	Words Mixed (7 Exercises)	Words Reader-Based (5 Exercises)	Lexical (22 Exercises)	Lexical Literal (10 Exercises)	Lexical Referential (12 Exercises)	Propositional (33 Exercises)	tional Text-Based (23 Exercises)	tional Reader-Based (10 Exercises)	Textual (50 Exercises)	Textual Text-Based (18 Exercises)	Textual Reader-Based (32 Exercises)
Nation	79.09	75.94	78.64	72.83	77.57	83.76	79.29	87.49	82.50	83.00	81.37	76.85	81.18	72.85
Region														
Northeast	0.21	0.65	2.15	−0.24	0.39	0.30	0.15	0.42	0.30	0.19	0.57	−0.03	−1.02	0.52
Southeast	−2.01*	−2.29*	−2.58	−2.30	−1.97	−1.45*	−1.11	−1.74	−1.92*	−1.51*	−2.85*	−2.23*	−2.02	−2.34*
Central	0.52	0.64	1.26	−0.17	1.17	−0.18	−0.72	0.26	0.53	0.31	1.02	0.79	0.87	0.75
West	1.10	0.78	−0.82	2.38	0.15	1.26	1.72*	0.88	0.96	0.94	0.99	1.22	1.72*	0.94
Sex														
Male	−1.39*	−0.22	−0.13	−0.08	−0.50	−2.06*	−3.04*	−1.24*	−1.11*	−1.16*	−1.00*	−1.67*	−1.60*	−1.70*
Female	1.37*	0.20	0.13	0.05	0.49	2.05*	3.00*	1.26*	1.08*	1.13*	0.97*	1.67*	1.59*	1.71*
Race/ethnicity														
White	2.94*	3.56*	3.40*	3.52*	3.77*	2.52*	2.72*	2.36*	2.75*	2.57*	3.17*	3.04*	2.89*	3.13*
Black	−16.61*	−19.40*	−18.25*	−19.81*	−19.97*	−14.96*	−16.42*	−13.75*	−15.80*	−14.73*	−18.26*	−16.91*	−16.12*	−17.36*
Hispano	−7.98*	−11.47*	−12.04*	−9.15*	−14.15*	−5.56*	−5.50*	−5.62*	−6.82*	−6.34*	−7.92*	−8.62*	−7.48*	−9.26*
Type of community†														
Rural	−0.66	−0.18	0.70	−0.77	−0.25	−1.05	−0.36	−1.62	−0.78	−0.31	−1.86	−0.58	−1.95	0.19
Disadvantaged urban	−10.37*	−13.74*	−11.76*	−12.70*	−17.17*	−9.29*	−9.84*	−8.84*	−9.42*	−8.23*	−12.15*	−10.33*	−9.86*	−10.60*
Advantaged urban	5.88*	7.10*	5.77*	8.35*	6.67*	4.60*	6.12*	3.33*	6.03*	5.47*	7.30*	5.92*	5.20*	6.33*
Size of community														
Big cities	−3.34*	−4.96*	−4.02*	−4.45*	−6.62*	−3.32*	−2.73	−3.82*	−2.57	−2.12	−3.60*	−3.31*	−3.69*	−3.10*
Fringes around big cities	1.14	1.29	0.75	2.40	0.27	0.75	−0.23	1.57*	0.87	0.63	1.40	1.45*	1.60	1.36
Medium cities	0.68	0.94	−0.16	1.29	1.56	0.93	0.94	0.93	0.59	0.49	0.82	0.55	0.52	0.57
Small places	0.51	1.03	1.38	0.09	2.00*	0.62	0.90	0.39	0.40	0.37	0.46	0.37	0.37	0.36
Parental education														
Not graduated high school	−8.57*	−10.01*	−8.97*	−11.17*	−9.42*	−7.53*	−9.87*	−5.58*	−7.90*	−7.13*	−9.67*	−8.98*	−7.88*	−9.60*
Graduated high school	−2.20*	−2.60*	−1.41	−3.04*	−3.18*	−1.40*	−1.68*	−1.16*	−2.16*	−1.98*	−2.58*	−2.44*	−2.10*	−2.63*
Some post high school	3.41*	2.55*	1.94	2.54*	3.17*	3.43*	4.35*	2.67*	3.26*	2.96*	3.98*	3.78*	3.60*	3.88*
Graduated college	4.54*	5.76*	4.35*	6.37*	6.32*	3.46*	4.14*	2.90*	4.21*	3.91*	4.91*	4.82*	4.22*	5.16*
Grade														
10	−14.89*	−16.09*	−13.84*	−16.89*	−17.21*	−15.31*	−18.02*	−13.04*	−14.16*	−13.65*	−15.33*	−14.77*	−14.36*	−15.01*
11	2.34*	2.70*	2.67*	2.54*	2.96*	2.39*	2.62*	2.20*	2.27*	2.12*	2.61*	2.24*	2.31*	2.20*
12	5.36*	5.46*	4.93*	6.03*	5.15*	5.39*	6.73*	4.27*	5.00*	4.95*	5.12*	5.55*	5.35*	5.67*
Achievement class														
Lowest quarter	−26.05*	−28.99*	−26.12*	−31.66*	−29.11*	−24.75*	−28.96*	−21.26*	−24.52*	−23.30*	−27.32*	−26.62*	−25.71*	−27.13*
Middle-lowest quarter	−1.24*	−1.99*	−0.14	−3.36*	−1.92*	0.46	−0.48	1.24*	−0.75	−0.53	−1.24*	−2.06*	0.49	−3.50*
Middle-highest quarter	9.73*	10.77*	8.64*	11.75*	11.52*	9.61*	10.89*	8.54*	9.71*	8.86*	11.67*	9.43*	9.46*	9.42*
Highest quarter	17.54*	20.20*	16.66*	23.22*	19.52*	14.64*	18.48*	11.44*	15.53*	14.96*	16.87*	19.25*	15.76*	21.21*

* *Asterisk indicates percentages statistically significant at the .05 level.*

† *This population group represents about one-third of the sample.*

Table A-6.

National Mean Percentages Correct and Mean Group Differences for In-School 17-Year-Olds on Comprehension Exercises by Passage Type, 1979-80

	All Comprehension (122 Exercises)	Expository (73 Exercises)	Expository Informative (9 Exercises)	Expository Evaluative (34 Exercises)	Expository Functional (19 Exercises)	Literary (49 Exercises)	Literary Tales (26 Exercises)	Literary Other Prose (14 Exercises)	Literary Poems (9 Exercises)
Nation	79.09	77.41	74.77	73.67	87.53	81.58	84.86	84.42	67.70
Region									
Northeast	0.21	0.47	−0.89	0.22	1.71*	−0.18	−0.31	−0.32	0.42
Southeast	−2.01*	−2.10*	−3.89*	−1.86*	−1.83	−1.88*	−1.93*	−1.77	−1.91
Central	0.52	0.25	0.39	0.19	0.30	0.94	0.53	1.71*	0.90
West	1.10	1.25	3.62*	1.37	−0.18	0.87	1.46*	0.08	0.41
Sex									
Male	−1.39*	−1.13*	−0.36	−1.22*	−1.27*	−1.77*	−1.02*	−2.35*	−3.05*
Female	1.37*	1.11*	0.37	1.19*	1.27*	1.77*	1.00*	2.34*	3.07*
Race/ethnicity									
White	2.94*	3.18*	3.69*	3.19*	2.92*	2.58*	2.60*	2.45*	2.74*
Black	−16.61*	−17.93*	−20.48*	−18.12*	−16.26*	−14.64*	−15.46*	−13.17*	−14.56*
Hispano	−7.98*	−8.61*	−9.73*	−8.40*	−8.57*	−7.04*	−5.96*	−7.46*	−9.52*
Type of community†									
Rural	−0.66	−0.54	−6.66	−0.24	1.66	−0.85	−1.49	−1.04	1.33
Disadvantaged urban	−10.37*	−11.60*	−13.64*	−11.59*	−10.66*	−8.54*	−8.52*	−6.83*	−11.30*
Advantaged urban	5.88*	6.76*	7.77*	7.27*	5.07*	4.56*	4.18*	4.59*	5.58*
Size of community									
Big cities	−3.34*	−3.49*	−5.69*	−2.99	−3.64*	−3.12*	−3.45*	−2.93*	−2.45
Fringes around big cities	1.14	1.18	3.59*	0.51	1.63*	1.09	1.61*	0.78	0.06
Medium cities	0.68	0.93	1.85	0.82	0.75	0.32	0.59	0.22	−0.30
Small places	0.51	0.49	−0.65	0.69	0.55	0.55	0.30	0.58	1.23
Parental education									
Not graduated high school	−8.57*	−9.84*	−12.25*	−10.23*	−7.78*	−6.67*	−6.61*	−5.35*	−8.91*
Graduated high school	−2.20*	−2.39*	−2.47*	−2.75*	−1.52*	−1.91*	−1.81*	−1.57*	−2.70*
Some post high school	3.41*	3.61*	4.13*	3.84*	2.82*	3.10*	3.50*	2.23*	3.31*
Graduated college	4.54*	5.10*	6.28*	5.50*	3.58*	3.72*	3.53*	3.56*	4.51*
Grade									
10	−14.89*	−16.01*	−18.51*	−16.35*	−14.01*	−13.21*	−13.04*	−13.27*	−13.63*
11	2.34*	2.47*	2.86*	2.45*	2.31*	2.15*	2.17*	2.35*	1.75*
12	5.36*	5.95*	7.55*	6.13*	4.78*	4.48*	3.87*	4.21*	6.64*
Achievement class									
Lowest quarter	−26.05*	−27.41*	−32.60*	−28.67*	−21.96*	−24.01*	−24.37*	−22.13*	−25.90*
Middle-lowest quarter	−1.24*	−1.93*	−2.26*	−3.52*	2.01*	−0.22	1.76*	0.41	−6.96*
Middle-highest quarter	9.73*	10.36*	12.80*	10.61*	8.60*	8.79*	9.25*	8.37*	8.11*
Highest quarter	17.54*	18.96*	22.06*	21.55*	11.35*	15.44*	13.31*	13.37*	24.80*

* *Asterisk indicates percentages statistically significant at the .05 level.*

† *This population group represents about one-third of the sample.*

Table A-7.

National Mean Percentages Correct and Mean Group Differences for All 17-Year-Olds on Comprehension Exercises by Tasks, 1979-80

	All Comprehension (122 Exercises)	Words (17 Exercises)	Words Text-Based (5 Exercises)	Words Mixed (7 Exercises)	Words Reader-Based (5 Exercises)	Lexical (22 Exercises)	Lexical Literal (10 Exercises)	Lexical Referential (12 Exercises)	Propositional (33 Exercises)	Propositional Text-Based (23 Exercises)	Propositional Reader-Based (10 Exercises)	Textual (50 Exercises)	Textual Text-Based (18 Exercises)	Textual Reader-Based (32 Exercises)
Nation	77.78	74.52	77.10	71.36	76.36	82.36	77.87	86.10	80.99	81.49	79.82	74.76	80.21	71.69
Region														
Northeast	0.49	0.86	2.39	0.43	−0.07	0.53	0.29	0.74	0.63	0.63	0.65	0.24	−0.68	0.76
Southeast	−2.74*	−3.04*	−4.04*	−2.82	−2.36	−2.42*	−1.95*	−2.82*	−2.88*	−2.52*	−3.69*	−2.68*	−2.18	−2.97*
Central	0.94	1.14	1.95	0.14	1.73	0.36	−0.11	0.75	1.08	0.77	1.78	1.02	1.03	1.02
West	1.20	0.86	−0.27	2.03	0.34	1.43	1.74*	1.17	1.10	1.10	1.09	1.29	1.53	1.15
Sex														
Male	−1.63*	−0.34	−0.32	−0.05	−0.76	−2.27*	−3.19*	−1.50*	−1.49*	−1.54*	−1.37*	−1.88*	−1.73*	−1.97*
Female	1.63*	0.33	0.32	0.03	0.75	2.28*	3.19*	1.52*	1.47*	1.53*	1.35*	1.89*	1.74*	1.98*
Race/ethnicity														
White	3.03*	3.74*	3.58*	3.72*	3.94*	2.63*	2.78*	2.51*	2.93*	2.76*	3.30*	3.04*	2.92*	3.11*
Black	−16.07*	−19.24*	−18.55*	−19.51*	−19.56*	−14.22*	−15.23*	−13.38*	−15.69*	−14.73*	−17.90*	−16.05*	−15.48*	−16.38*
Hispano	−8.95*	−12.01*	−11.17*	−10.50*	−14.96*	−7.70*	−8.00*	−7.45*	−8.16*	−7.84*	−8.89*	−8.98*	−8.17*	−9.43*
Type of community†														
Rural	−0.47	0.59	0.87	0.02	1.11	−0.87	−0.45	−1.21	−0.36	0.30	−1.86	−0.72	−1.89	−0.08
Disadvantaged urban	−10.17*	−14.07*	−11.55*	−13.33*	−17.65*	−9.41*	−9.38*	−9.43*	−9.09*	−8.00*	−11.62*	−9.89*	−9.49*	−10.12*
Advantaged urban	6.64*	8.10*	7.23*	9.25*	7.35*	5.50*	6.78*	4.43*	6.85*	6.43*	7.81*	6.52*	5.82*	6.92*
Size of community														
Big cities	−3.31*	−5.11*	−4.78*	−3.83*	−7.24*	−3.36*	−2.70	−3.91*	−2.98*	−2.52	−4.03*	−2.89*	−3.04*	−2.80*
Fringes around big cities	1.84*	1.87	2.01	2.64	0.65	1.34	0.51	2.03*	1.84	1.59	2.44*	2.04*	2.03*	2.04*
Medium cities	0.44	1.14	0.34	1.71	1.13	0.65	0.25	0.99	−0.16	−0.46	0.53	0.49	0.29	0.60
Small places	0.27	0.77	0.91	−0.36	2.21*	0.44	0.72	0.21	0.34	0.40	0.21	−0.02	0.04	−0.05
Parental education														
Not graduated high school	−9.12*	−10.77*	−8.93*	−13.13*	−9.30*	−8.13*	−10.22*	−6.38*	−8.67*	−7.99*	−10.23*	−9.30*	−8.46*	−9.78*
Graduated high school	−1.74*	−2.15*	−0.73	−2.59*	−2.96*	−0.78	−1.13*	−0.48	−1.54*	−1.48*	−1.69*	−2.14*	−1.74*	−2.37*
Some post high school	3.86*	3.14*	1.95	3.51*	3.83*	4.12*	5.60*	2.88*	3.70*	3.51*	4.15*	4.10*	3.96*	4.18*
Graduated college	5.21*	6.55*	4.71*	7.73*	6.75*	4.05*	4.67*	3.53*	4.82*	4.54*	5.46*	5.53*	4.81*	5.94*
Achievement class														
Lowest quarter	−27.07*	−29.43*	−26.09*	−31.87*	−29.34*	−26.33*	−29.88*	−23.37*	−26.21*	−25.04*	−28.91*	−27.17*	−26.64*	−27.47*
Middle-lowest quarter	−1.64*	−2.90*	−1.14	−4.44*	−2.50*	−0.05	−1.45*	1.11	−0.96*	−0.71	−1.55*	−2.35*	0.34	−3.87*
Middle-highest quarter	10.11*	11.27*	9.52*	12.23*	11.67*	10.41*	11.63*	9.40*	10.18*	9.31*	12.19*	9.53*	9.74*	9.41*
Highest quarter	18.57*	21.06*	17.75*	24.02*	20.18*	15.91*	19.63*	12.80*	16.96*	16.39*	18.26*	19.97*	16.55*	21.90*

* *Asterisk indicates percentages statistically significant at the .05 level.*

† *This population group represents about one-third of the sample.*

Table A-8.

National Mean Percentages Correct and Mean Group Differences for All 17-Year-Olds on Comprehension Exercises by Passage Type, 1979-80

	All Comprehension (122 Exercises)	Expository (73 Exercises)	Expository Informative (9 Exercises)	Expository Evaluative (45 Exercises)	Expository Functional (19 Exercises)	Literary (49 Exercises)	Literary Tales (26 Exercises)	Literary Other Prose (14 Exercises)	Literary Poems (9 Exercises)
Nation	77.78	75.97	73.30	72.15	86.28	80.48	83.80	83.23	66.59
Region									
Northeast	0.49	0.80	−0.73	0.66	1.83*	0.03	−0.32	0.11	0.93
Southeast	−2.74*	−2.96*	−3.50	−2.77*	−3.14*	−2.41*	−2.31*	−2.40*	−2.76*
Central	0.94	0.73	0.72	0.62	1.01	1.24	0.83	1.91*	1.36
West	1.20	1.35	2.95	1.48	0.29	0.98	1.60*	0.22	0.38
Sex									
Male	−1.63*	−1.36*	−0.75	−1.45*	−1.43*	−2.04*	−1.26*	−2.61*	−3.41*
Female	1.63*	1.36*	0.75	1.44*	1.44*	2.04*	1.26*	2.60*	3.44*
Race/ethnicity									
White	3.03*	3.33*	3.82*	3.30*	3.15*	2.60*	2.59*	2.47*	2.82*
Black	−16.07*	−17.62*	−19.61*	−17.64*	−16.63*	−13.76*	−14.53*	−12.15*	−14.06*
Hispano	−8.95*	−9.65*	−11.64*	−9.31*	−9.50*	−7.91*	−7.10*	−8.38*	−9.50*
Type of community†									
Rural	−0.47	−0.26	−6.55	0.11	1.84	−0.77	−1.60	−0.44	1.13
Disadvantaged urban	−10.17*	−11.43*	−14.31*	−11.31*	−10.32*	−8.30*	−8.00*	−7.49*	−10.45*
Advantaged urban	6.64*	7.53*	8.33*	8.14*	5.74*	5.32*	4.94*	5.38*	6.32*
Size of community									
Big cities	−3.31*	−3.47*	−5.24*	−2.98	−3.80*	−3.06*	−3.10*	−3.41*	−2.38
Fringes around big cities	1.84*	1.94	3.62	1.42	2.37*	1.68*	2.16*	1.38	0.79
Medium cities	0.44	0.50	1.73	0.27	0.46	0.34	0.18	0.55	0.47
Small places	0.27	0.29	−0.67	0.43	0.40	0.25	0.07	0.35	0.60
Parental education									
Not graduated high school	−9.12*	−10.32*	−13.36*	−10.58*	−8.28*	−7.34*	−7.27*	−6.14*	−9.40*
Graduated high school	−1.74*	−1.92*	−2.03*	−2.20*	−1.21*	−1.46*	−1.23*	−1.33*	−2.33*
Some post high school	3.86*	4.15*	4.72*	4.34*	3.43*	3.44*	3.77*	2.79*	3.48*
Graduated college	5.21*	5.82*	7.35*	6.25*	4.09*	4.31*	4.04*	4.23*	5.19*
Achievement class									
Lowest quarter	−27.07*	−28.37*	−33.33*	−29.41*	−23.58*	−25.14*	−25.23*	−24.01*	−26.64*
Middle-lowest quarter	−1.64*	−2.44*	−2.92*	−4.07*	1.65*	−0.45	1.03*	0.87	−6.76*
Middle-highest quarter	10.11*	10.74*	13.12*	10.85*	9.33*	9.17*	9.83*	8.67*	8.06*
Highest quarter	18.57*	20.05*	23.11*	22.58*	12.58*	16.38*	14.29*	14.47*	25.36*

* *Asterisk indicates percentages statistically significant at the .05 level.*

† *This population group represents about one-third of the sample.*

Appendix B

Summary Results for the Nation and Reporting Groups on Study Skills Exercises, 1979-80 Reading and Literature Assessment

MASSACHUSETTS—THE KINDERGARTEN IN THE NORTH END INDUSTRIAL HOME, BOSTON.
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Table B-1.

National Mean Percentages Correct and Mean Group Differences for 9-Year-Olds on Study Skills Exercises, 1979-80

	All Study Skills (53 Exercises)†	Charts and Graphs (11 Exercises)	Book Parts (10 Exercises)	Reference Material (29 Exercises)
Nation	64.45	67.57	57.58	64.80
Region				
Northeast	2.77*	1.20	3.70	3.53*
Southeast	−2.10	−4.41*	−0.52	−1.66
Central	1.14	3.28*	0.65	0.35
West	−1.45	−0.01	−2.93	−1.79*
Sex				
Male	−3.14*	−3.60*	−3.08*	−3.13*
Female	3.12*	3.53*	3.02*	3.14*
Race/ethnicity				
White	2.87*	3.74*	2.93*	2.45*
Black	−12.02*	−16.52*	−12.14*	−9.89*
Hispano	−11.32*	−13.88*	−11.91*	−10.20*
Type of community§				
Rural	−1.50	2.16	−5.63	−0.96
Disadvantaged urban	−14.31*	−20.23*	−13.57*	−12.93*
Advantaged urban	9.78*	11.01*	11.26*	9.15*
Size of community				
Big cities	−2.85*	−3.84	−3.79*	−2.28*
Fringes around big cities	2.13	1.76	3.47	2.07
Medium cities	0.27	−0.22	2.46	−0.38
Small places	0.23	0.79	−0.56	0.26
Parental education				
Not graduated high school	−7.89*	−9.46*	−7.74*	−7.35*
Graduated high school	0.54	3.79*	0.90	−0.75
Some post high school	2.88*	4.09*	3.79*	2.31*
Graduated college	2.91*	2.44*	3.00*	3.02*
Grade				
3	−13.27*	−14.18*	−14.48*	−12.70*
4	5.67*	6.00*	6.25*	5.42*
Achievement class				
Lowest quarter	−27.38*	−32.37*	−29.13*	−24.60*
Middle-lowest quarter	−5.09*	−5.77*	−6.80*	−4.49*
Middle-highest quarter	9.19*	12.19*	8.48*	8.08*
Highest quarter	23.23*	25.86*	27.42*	20.98*

* *Asterisk indicates percentages statistically significant at the .05 level.*

† *This total includes three exercises that are not classified as charts and graphs, book parts or reference material.*

§ *This population group represents about one-third of the sample.*

Table B-8.

National Mean Percentages Correct and Mean Group Differences for 13-Year-Olds on Study Skills Exercises, 1979-80

	All Study Skills (69 Exercises)†	Charts and Graphs (22 Exercises)	Book Parts (19 Exercises)	Reference Material (25 Exercises)
Nation	67.21	69.03	64.83	68.04
Region				
Northeast	1.77	0.86	2.92*	1.52
Southeast	−2.93*	−2.90*	−3.27*	−2.46
Central	2.62*	3.12*	1.94*	2.46*
West	−1.45	−1.07	−1.38	−1.74
Sex				
Male	−2.49*	−1.55*	−2.03*	−3.76*
Female	2.43*	1.49*	1.99*	3.67*
Race/ethnicity				
White	2.93*	3.01*	3.08*	2.72*
Black	−12.93*	−13.77*	−13.34*	−11.64*
Hispano	−10.00*	−9.28*	−10.91*	−9.99*
Type of community§				
Rural	−4.22*	−5.21*	−4.42*	−2.89*
Disadvantaged urban	−8.82*	−8.91*	−8.11*	−9.69*
Advantaged urban	7.71*	7.73*	7.44*	7.98*
Size of community				
Big cities	−3.54*	−3.55*	−4.23*	−3.40*
Fringes around big cities	2.46*	2.85*	2.45*	1.87*
Medium cities	0.43	0.01	0.16	0.49
Small places	−0.26	−0.27	−0.26	0.14
Parental education				
Not graduated high school	−8.96*	−8.17*	−9.01*	−9.18*
Graduated high school	−1.05*	−0.53	−0.40	−1.95*
Some post high school	3.32*	3.22*	2.26*	3.59*
Graduated college	4.30*	4.13*	4.14*	4.51*
Grade				
7	−8.66*	−8.20*	−9.09*	−8.52*
8	3.80*	3.66*	3.97*	3.74*
Achievement class				
Lowest quarter	−24.94*	−23.34*	−25.93*	−25.64*
Middle-lowest quarter	−4.27*	−3.49*	−3.99*	−4.81*
Middle-highest quarter	8.57*	7.49*	8.69*	9.51*
Highest quarter	20.62*	19.29*	21.23*	20.91*

** Asterisk indicates percentages statistically significant at the .05 level.*

† This total includes three exercises that are not classified as charts and graphs, book parts or reference material.

§ This population group represents about one-third of the sample.

Table B-3.

National Mean Percentages Correct and Mean Group Differences for In-School 17-Year-Olds on Study Skills Exercises, 1979-80

	All Study Skills (68 Exercises)†	Charts and Graphs (22 Exercises)	Book Parts (19 Exercises)	Reference Material (24 Exercises)
Nation	[illegible]	80.68	77.03	78.58
Region				
Northeast	1.00	0.37	2.24*	0.67
Southeast	−2.10*	−2.33*	−2.02	−2.03*
Central	0.71	1.13	−0.28	1.16
West	0.26	0.64	0.10	0.02
Sex				
Male	−1.18*	−0.26	−1.09*	−2.01*
Female	1.21*	0.27	1.13*	2.04*
Race/ethnicity				
White	2.61*	2.50*	2.69*	2.61*
Black	−14.46*	−14.37*	−14.74*	−14.46*
Hispano	−9.09*	−7.46*	−9.81*	−9.11*
Type of community§				
Rural	−2.15	−1.58	−4.79	−0.53
Disadvantaged urban	−9.82*	−9.64*	−7.61*	−9.16*
Advantaged urban	4.60*	3.96*	5.87*	3.82*
Size of community				
Big cities	−2.64*	−3.09*	−2.54	−2.58
Fringes around big cities	1.67*	2.13*	2.93*	0.12
Medium cities	−0.28	0.66	−1.88	0.28
Small places	0.32	−0.04	0.03	0.99*
Parental education				
Not graduated high school	−8.32*	−7.61*	−9.54*	−7.91*
Graduated high school	−1.81*	−1.90*	−1.73*	−1.75*
Some post high school	3.15*	3.19*	3.06*	3.10*
Graduated college	4.17*	3.76*	4.89*	3.99*
Grade				
10	−13.35*	−12.30*	−13.59*	−14.07*
11	2.16*	1.96*	2.35*	2.18*
12	5.15*	4.29*	5.63*	5.51*
Achievement class				
Lowest quarter	−22.64*	−21.45*	−23.12*	−23.61*
Middle-lowest quarter	−1.07*	−2.07*	−1.16	0.52
Middle-highest quarter	8.43*	7.94*	8.34*	8.70*
Highest quarter	15.25*	15.56*	15.93*	14.36*

* *Asterisk indicates percentages statistically significant at the .05 level.*

† *This total includes three exercises that are not classified as charts and graphs, book parts or reference material.*

§ *This population group represents about one-third of the sample.*

Table B-4.

National Mean Percentages Correct and Mean Group Differences for All 17-Year-Olds on Study Skills Exercises, 1979-80

	All Study Skills (68 Exercises)†	Charts and Graphs (22 Exercises)	Book Parts (19 Exercises)	Reference Material (24 Exercises)
Nation	77.48	79.40	75.51	77.24
Region				
Northeast	1.17	0.91	1.96*	0.80
Southeast	−3.11*	−3.42*	−2.98*	−2.99*
Central	1.04	1.52*	0.19	1.26
West	0.84	0.90	0.96	0.77
Sex				
Male	−1.46*	−0.46	−1.35*	−2.33*
Female	1.48*	0.47	1.38*	2.36*
Race/ethnicity				
White	2.70*	2.71*	2.58*	2.73*
Black	−14.18*	−14.33*	−13.89*	−14.47*
Hispano	−9.60*	−9.14*	−9.55*	−9.37*
Type of community§				
Rural	−1.92	−1.38	−4.30	−0.33
Disadvantaged urban	−8.76*	−10.00*	−7.25*	−8.93*
Advantaged urban	5.41*	4.77*	6.71*	4.60*
Size of community				
Big cities	−2.44*	−2.83*	−2.55	−2.35
Fringes around big cities	2.40*	2.79*	3.87*	0.79
Medium cities	−0.53	0.24	−1.96	0.05
Small places	0.03	−0.30	−0.20	0.65
Parental education				
Not graduated high school	−9.27*	−8.50*	−10.58*	−8.78*
Graduated high school	−1.48*	−1.41*	−1.42*	−1.67*
Some post high school	3.93*	4.00*	3.54*	4.07*
Graduated college	4.93*	4.58*	5.71*	4.65*
Achievement class				
Lowest quarter	−24.14*	−22.86*	−24.89*	−25.15*
Middle-lowest quarter	−1.31*	−2.36*	−1.35	0.20
Middle-highest quarter	9.00*	8.55*	8.82*	9.38*
Highest quarter	16.43*	16.64*	17.38*	15.56*

* *Asterisk indicates percentages statistically significant at the .05 level.*

† *This total includes three exercises that are not classified as charts and graphs, book parts or reference material.*

§ *This population group represents about one-third of the sample.*

Appendix C

Examples of Exercises Administered in the 1979-80 Reading and Literature Assessment

18 M'GUFFEY'S PRIMER

An old log hut.
A new log hut.
Is it for me?
Is it for you?
Why do you ask?

I see a tub
The tub is big.
Can you use it?
O yes, I can.
I can use it.

Is it a bed?
It is a bed.
Is it for you?
It is for me.
Kit is on my bed.

Old Tom, our cat.
He is ill in bed.
Tom saw a rat.
The rat saw Tom.
The rat ran off.

Following are examples of the reading passages administered to students in the third reading and literature assessment. Each passage is followed by several exercises (questions) about the passage itself. As described in Chapters 3 and 4 of this report, the *exercises* were classified by types of tasks they required and the *passages* were classified as either expository or literary. This classification scheme allowed assessment results to be viewed in two ways: by the type of question asked and by the type of passage administered.

In addition to the passages and exercises administered to a single age population, some were administered to more than one age. Some were administered to 9- and 13-year-olds; some to 13- and 17-year-olds; and a small group of exercises was administered to all three age populations.

Expository passages were conceived by the developers to be of three broad types: informative, evaluative and functional. Informative passages are straightforward and factual and do not elicit the reader's involvement, while evaluative passages elicit the reader's emotional involvement or critical judgment. Examples of informative exposition are encyclopedia and text-book material and certain kinds of news articles. Examples of evaluative exposition are editorials and human interest articles. Functional exposition fulfills some requirement of the reader for specific information. Examples are applications, forms, factsheets, and so on.

Literary passages, too, were of three broad types: tales, which included fictional stories derived from folktales, fairy tales, myths, parables, and so on; other prose, which included other kinds of fiction such as popular stories, a play, a journal and a character sketch; and finally poems, which included both rhyming and nonrhyming poetry.

Each of the example exercises is labeled to indicate the age population to whom it was administered and the comprehension task it focused on. The reading passages are labeled as expository or literary and the subclassification is indicated also. Performance results are shown as percentages of students who correctly answered the question.

Comprehension Tasks

Expository — Informative
Sample Exercise

Read the article below and then answer the questions on the next two pages.

Russian Seaports

Throughout history, a nation with good seaports has had an advantage in carrying on trade. In general, trade by water has been easier, cheaper, and often faster than trade by land. Even today, water is the most efficient way to carry bulky goods, such as ore.

Russia has the longest seacoast of any country in the world, yet it has had few usable seaports. Waters along most of Russia's Arctic coast are frozen over nine to ten months of the year. Murmansk is the only Arctic port that is ice-free year-around. Its usefulness has been limited because the seas tying it to western Europe are often stormy and treacherous.

The desire for ice-free ports was a major reason behind several Russian wars. In particular, Russian leaders fought to gain ports on the Baltic Sea, because the Baltic offers an open route to the Atlantic Ocean and western Europe.

One of the most important Baltic ports was Riga, near the mouth of the Western Dvina River. Medieval trade routes linked Riga with Europe and the Mediterranean. And the Western Dvina linked Riga with Russia's interior.

From 1557 to 1582, Tsar Ivan IV tried to conquer Riga and Narva, another Baltic port. He wanted to link Russia's internal trade routes with the Baltic Sea. After some initial successes, he was defeated by Polish and Swedish forces. Further attempts to win control of the Baltic ports were made by Tsar Peter the Great. In 1703 he built the city of St. Petersburg on the Gulf of Finland, hoping to open a new avenue to the West. As a result of the Great Northern War (1707-1721), Peter became master of the eastern shores of the Baltic. When Russia acquired Finland in 1809, it gained still more outlets to the Baltic.

Russia's leaders have also looked south to the Black Sea. Russia fought the Turks to gain access to the Black Sea. Then it tried to win control of the straits leading from the Black Sea to the Mediterranean.

In the 19th and 20th centuries, Russia looked eastward. It fought Japan more than once in its search for an ice-free port on the Pacific.

% of Correct Responses	
Age 13	Age 17

(Propositional)

A. Why does Russia have few usable seaports?

	Because Russia has few ocean boundaries
85.1	95.4 **Because the water along much of Russia's coast is frozen nearly all year**
	Because Russia has lost many of its seaports in wars with other countries
	Because the coastal land of Russia is very steep and rocky
	I don't know.

% of Correct Responses		
Age 13	Age 17	
		(Textual)
		B. Why did the Baltic Sea hold an attraction for the Russians?
		Because it was the stronghold of the Finnish empire
65.8	83.4	**Because it provided a link between Russia's interior and western Europe**
		Because it was the only possibility for a Russian warm water port
		Because it was the last part in a plan to link the Baltic and Black Seas
		I don't know.
		(Textual)
		C. According to the article, what did the wars with Japan and the Great Northern War have in common?
		Both were undertaken during the rule of Ivan IV.
56.9	78.5	**Both were undertaken to obtain ice-free ports.**
		Both were undertaken to strengthen positions against invasion.
		Both were undertaken because treaties were broken.
		I don't know.
		(Textual)
		D. What is the main purpose of the article?
		To name the various land and sea routes which Russia used throughout history
58.0	76.7	**To discuss Russia's attempts to gain good water routes for trade**
		To show how Russia became a great economic leader in the world
		To describe important wars in Russia's history
		I don't know.
		(Words)
		E. The article says:
		In 1703 he built the city of St. Petersburg on the Gulf of Finland, hoping to open a new **avenue** to the West.
		What does the word **avenue** mean in this sentence from the article?
64.6	75.8	**Route**
		Street
		Territory
		Trade
		I don't know.

Expository — Evaluative
Sample Exercise

Read the editorial and then answer the questions below and on the next two pages.

Competition is healthy

Last year, the Supreme Court presented doctors, lawyers, dentists, and other professionals with a right that most of them did not want — the right to advertise their services to the public. Since then the professions, especially the law and dentistry, have been acrimoniously divided over the question of advertising.

Older lawyers and dentists with established practices have spurned the idea of hawking their services, as though, they say, they were selling another dog food or deodorant. But young men, trying to find a market for their services, have seized the opportunity to go to the public. Established members of the profession accuse them of misleading the public and undermining professional standards.

It is easy to sympathize with someone who has built a practice the hard way and sees it threatened by an interloper who values the hard sell above professional dignity. But the fact remains that most of the professions could benefit from an injection of old-fashioned competition. In a world where fees are never publicized and the quality of work is hard to judge, the public has no way to tell whether it is getting its money's worth.

If established practitioners think the public is being misled by irresponsible advertising, there is always a step they can take. They can advertise themselves, both individually and through professional groups. They can tell the public what they think good practice is and what it should cost. They can describe the services they perform and what qualifications they have.

If some professionals abuse the privilege of advertising, there are plenty of laws on the books to bring them into line. But it is time for established practitioners to realize that the public needs to know more than a little bronze plate on the door can tell it.

% of Correct Responses Age 17

A. How much did you like reading this editorial?

I liked it very much.
I liked it.
I can't decide.
I disliked it.
I disliked it very much.
I don't know.

Note: For analysis purposes, the five options were combined and renumbered as indicated. "I don't know" was combined with "I can't decide" for this exercise part.

% of Correct Responses Age 17

(Textual)

B. According to the editorial, what do older established professionals generally think about advertising?

68.0 **They think advertising is unprofessional.**
They think advertising adds unnecessary costs to their services.
They think advertising promotes standards of good practice.
They think advertising is necessary only for younger professionals.
I don't know.

(Propositional)

C. According to the editorial, what can older professionals do if they think the public is being misled by advertising?

They can request that the Supreme Court reverse its decision.
They can wait until the public tires of advertising by professionals.
70.2 **They can advertise their own qualifications and services.**
They can expel from the profession anyone who advertises.
I don't know.

(Words)

D. The editorial says:

It is easy to sympathize with someone who has built a practice the hard way and sees it threatened by an **interloper** who values the hard sell above professional dignity.

What does the word **interloper** mean in this sentence from the editorial?

A person who does not believe in competition
55.1 **A person who intrudes upon others**
A person who misleads the public through advertising
A person who is an established member of a profession
I don't know.

% of Correct Responses Age 17

(Textual)

E. What is the main purpose of the editorial?

To explain the new law which allows advertising by professionals

To show the problems younger lawyers, dentists, and doctors have getting started

30.8 **To encourage people to see the need for advertising professional fees and services**

To warn people about the dangers of advertising by professionals

I don't know.

Expository — Functional
Sample Exercise

The back of a Jello-O® **Brand Gelatin Dessert** package is shown below. Read the information from the package and then answer the questions below and on the next page.

JELL-O raspberry
ARTIFICIAL FLAVOR

DIRECTIONS: Add 1 cup boiling water to gelatin. Stir until dissolved. Add 1 cup cold water. Chill until set. Makes 4 servings, ½ cup each.

To add other ingredients: Fold ½ to 1½ cups into thickened gelatin. (Do not add fresh or frozen pineapple.) Chill until set.

To mold gelatin: Decrease cold water to ½ cup. Pour into mold; chill until firm. Dip just to rim in warm water about 10 seconds. Shake to loosen. Top with wet plate, invert the plate and mold together, remove mold.

"The New Joys of Jell-O® Recipe Book". Over 100 Jell-O Gelatin dessert and salad favorites in a colorful 128-page hard-cover book. Offer: Send $1.00 (no stamps) with your name, address, and ZIP code to:
The New Joys of Jell-O, Box 3070, Kankakee, Illinois 60901.

GENERAL FOODS CORPORATION, WHITE PLAINS, N.Y. 10625, U.S.A.

NUTRITION INFORMATION
SERVING SIZE — CUP
SERVINGS PER PACKAGE 4

	MIX TO MAKE 1 SERVING
CALORIES	80
PROTEIN	2G — NOT A SIGNIFICANT SOURCE OF PROTEIN
CARBOHYDRATE	19G
FAT	0

CONTAINS LESS THAN 2% OF THE U.S. RECOMMENDED DAILY ALLOWANCES (U.S. RDA) OF VITAMIN A, VITAMIN C, THIAMINE, RIBOFLAVIN, NIACIN, CALCIUM AND IRON.

INGREDIENTS: SUGAR, GELATIN, ADIPIC ACID (FOR TARTNESS), DISODIUM PHOSPHATE (CONTROLS ACIDITY), FUMARIC ACID (FOR TARTNESS), ARTIFICIAL COLOR, ARTIFICIAL FLAVOR.

8G

Reproduced courtesy of General Foods Corporation, owner of the registered trademark JELL-O.

% of Correct Responses	
Age 9	Age 13

(Propositional)

A. According to the directions, when should you add cold water to the gelatin?

59.2 85.0

After you dissolve the gelatin in the boiling water
Before you add one cup of boiling water
After you chill the gelatin
Before you stir the gelatin
I don't know.

(Words)

B. The package directions say:

Top with wet plate, **invert** the plate and mold together, remove mold.

What does the word **invert** mean in this sentence from the package?

25.9 63.6

Turn upside down
Remove
Break apart
Heat up
I don't know.

% of Correct Responses	
Age 9	Age 13

(Propositional)

C. Where should you send $1.00 in order to get the Jello-O® recipe book?

	Chicago, Illinois
	New York, New York
73.0	86.5 **Kankakee, Illinois**
	White Plains, New York
	I don't know.

Literary — Tale
Sample Exercise

Read the story and then answer the questions below and on the next page.

Paul Bunyan's Daughter Teeny

Paul Bunyan's daughter Teeny was the smartest girl in the Great Lakes Country. She had the job of gathering eggs for pancakes.

She got them from the Egg Plant that grew in a meadow fifty miles away.

Teeny always rolled home on the eggs. They were all beaten, ready for pancakes, when she reached camp.

No one has ever raised an eggplant that would grow eggs. But the name is still used, and the Lumberjacks say that's proof enough for the story.

From **Paul Bunyan, the Work Giant** by Ida Virginia Turney. Used by permission of Binford & Mort, publishers.

% of Correct Responses Age 9	
	A. How much did you like reading this story? I liked it. I can't decide. I didn't like it.
	(Lexical)
	B. Where did Teeny get the eggs?
89.2	**From the Egg Plant**
	From a nearby farmer
	From her own chickens
	From Paul Bunyan
	I don't know.
	(Textual)
	C. How does the writer make this story sound?
	Sensible and reasonable
	Frightening and mysterious
28.1	**Playful and funny**
	Exciting and thrilling
	I don't know.
	(Propositional)
	D. Why did Teeny roll home on the eggs?
	To get home faster
	To make them round
	To keep them from breaking
63.2	**To beat the eggs**
	I don't know.

Literary — Other Prose
Sample Exercise

Read the story below and then answer the questions on the next two pages.

Somebody's Son

He sat, washed up on the side of the highway, a slim, sunbeaten driftwood of a youth. He was hunched on his strapped-together suitcase, chin on hands, elbows on knees, staring down the road. Not a car was in sight. Except for him, the dead, still Dakota plains were empty.

Now he was eager to write that letter he had kept putting off. Somehow, writing it would be almost like having company.

He unstrapped his suitcase and fished out a small unopened package of stationery from the pocket on the underside of the lid. Sitting down in the gravel of the roadside, he closed the suitcase and used it as a desk.

Dear Mom,

If Dad will permit, I would like to come home. I know there's little chance he will. I'm not going to kid myself. I remember he said once if I ever ran off I might as well keep on going.

All I can say is that I felt leaving home was something I had to do. Before even considering college, I wanted to find out more about life and about me and the best way for us (life and me) to live with each other. Please tell Dad — and I guess this'll make him sore all over again — I'm still not certain that college is the answer for me. I think I'd like to work for a time and think it over.

You won't be able to reach me by mail, because I'm not sure where I'll be next. But in a few days I hope to be passing by our place. If there's any chance Dad will have me back, please ask him to tie a white cloth to the apple tree in the south pasture — you know the one, the Grimes Golden beside the tracks. I'll be going by on the train. If there's no cloth on the tree I'll just quietly, and without any hard feelings toward Dad — I mean that — keep on going.

Love,
David

% of Correct Responses		
Age 13	Age 17	
		(Lexical)
		A. Why did David write the letter?
		To tell his mother that he had decided to go to college
91.2	96.6	**To get his father's approval to return home**
		To ask his parents to send him money
		To let his parents know he was leaving home
		I don't know.
		(Lexical)
		B. When does David hope to be riding by his home?
94.7	97.5	**In a few days**
		In two weeks
		Next year
		Never
		I don't know.

% of Correct Responses	
Age 13	Age 17

(Textual)

C. What kind of person does David think his father is?

61.7	78.7

Stubborn and unbending
Weak and uncertain
Easygoing and carefree
Fair and understanding
I don't know.

Literary — Poems
Sample Exercise

Read the poem below and then answer the questions on the next page.

The Mouse

I heard a mouse
Bitterly complaining
In a crack of moonlight
Aslant on the floor — — —

"Little I ask
And that little is not granted;
There are few crumbs
In this world any more.

"The bread box is tin
And I cannot get in.

"The jam's in a jar
My teeth cannot mar.

"The cheese sits by itself
On the ice-box shelf.

"All night I run
Searching and seeking;
All night I run
About the floor.

"Moonlight is there
And a bare place for dancing,
But no little feast
Is spread any more."

% of Correct Responses Age 9	
	A. How much did you like reading this poem?
	I liked it.
	I can't decide.
	I didn't like it.
	(Textual)
	B. What does the mouse in the poem want to do?
	Chew on the table
63.5	**Eat a few leftover crumbs**
	Dance on the bare floor
	Search for a crack of moonlight
	I don't know.
	(Textual)
	C. How does the mouse feel?
	Bored and tired
	Happy and carefree
45.7	**Upset and discouraged**
	Satisfied and content
	I don't know.

Study Skills

Book Parts
Sample Exercise

% of Correct Responses Age 9	
	What type of information is found in the table of contents of a textbook?
	The life of the writer of the book
	Unusual or special words found in the book
55.0	**The name and page of each chapter**
	The date the book was written
	I don't know.

Library and Reference Skills
Sample Exercise

The list of guide words below shows the first and last topics contained in each volume of an encyclopedia. For example, the first topic in Volume 2 is "Art Nouveau" and the last topic is "Burmese." Use this list to answer the questions below and on the next page.

Volume	Guide Words
Volume 1	A-Artillery
Volume 2	Art Nouveau-Burmese
Volume 3	Burnap-Colonie
Volume 4	Colonna-Electron
Volume 5	Electron Gun-Germanicus
Volume 6	Germanium-Infantry
Volume 7	Infantry-Longhi
Volume 8	Longinus-Music
Volume 9	Musical-Phrygia
Volume 10	Phyfe-Sibelius
Volume 11	Sibenik-Uruguay
Volume 12	U.S.A.-Zworykin

% of Correct Responses	
Age 13	Age 17

A. In which volume should you look first to find out about the eating habits of a frog?

64.5 80.4

Volume 4
Volume 5
Volume 6
Volume 9
I don't know.

B. In which volume should you look first to learn about liberalism from the eighteen hundreds to modern times?

63.5 79.1

Volume 3
Volume 4
Volume 7
Volume 8
I don't know.

C. In which volume should you look first to find information on national parks and mountain regions in Canada?

60.7 76.5

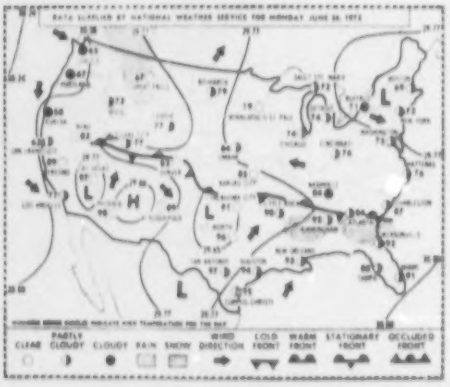
Volume 3
Volume 8
Volume 9
Volume 10
I don't know.

% of Correct Responses	
Age 13	Age 17

Charts and Graphs
Sample Exercise

A weather map from a newspaper is shown below. Use the weather map to answer the questions on the next page.

Today's Weather Forecast



% of Correct Responses	
Age 13	Age 17

A. What will the weather be like in Forth Worth, Texas?

	Hot and partly cloudy
87.8	**Hot and clear**
	Cool and windy
	Cool and partly cloudy
	I don't know.

B. What will the weather be like just south of the stationary front running through Little Rock, Arkansas, and Atlanta, Georgia?

	Windy
	Clear
62.5	**Rainy**
	Cool
	I don't know.

C. What can be said about the weather forecast for the cities of Boston and New York?

	A stationary front will be located between Boston and New York.
73.4	**Both Boston and New York will be partly cloudy.**
	Both Boston and New York will get easterly breezes from the Atlantic Ocean.
	Boston will be warmer than New York.
	I don't know.

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